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Address.

OUR THERAPEUTICS.*

IMPORTANCE OF RECOGNITION OF CERTAIN BLOOD-CHANGES, AND ESPECIALLY TOXEMIA, THEREIN.

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Mr. President and Members of the Ohio State Medical Society; Ladies and Gentlemen:—Among this large and distinguished audience assembled here this afternoon, I recognize many familiar faces, of friends, who, nearly two years ago assisted in the celebration of the fiftieth anniversary of the AMERICAN MEDICAL ASSOCIATION, in the city of Philadelphia. The pleasant impressions and agreeable recollections of that jubilee meeting will remain with most of us as long as life itself shall endure. Some grateful memory of that occasion, I think, must certainly have moved your president to invite me to address you to-day. This is an act of courtesy, which I correctly construe as a compliment to the medical profession of the "City of Brotherly Love," and also to the Medico-Chirurgical College of Philadelphia, with both of which my professional life has been closely identified. It surely is an exceptional honor to be invited to appear before the highest medical society of the great commonwealth of Ohio, assembled in annual convention, and in the name of those I represent, as well as on my own behalf, I sincerely and heartily thank you. It is not for me to question the wisdom of your choice, but simply to proceed to fulfil the duty that your kind favor has assigned me. You are familiar with the exigent demands of college engagements and hospital and other professional duties, and I feel assured of your indulgence if I fail to do such justice as I could wish to my subject on this occasion, or to this brilliant and accomplished audience.

Permit me to call your attention to the fact that our Pennsylvania State Medical Society will, in the course of a very few days hold its forty-ninth annual session. A large attendance and a full program will give interest and value to the meeting. On behalf of my fellow members of the Pennsylvania State Medical Society, I beg to extend to every one here a very cordial invitation to attend the meeting, which takes place at Johnstown, Pa., on the 16th instant, the success and enjoyment of which will be greatly enhanced by your presence.

I bring to you to day a sincere, fraternal greeting from the physicians of a sister State, whose border adjoins your own as you face the rising sun. Fortunately for us, owing to the advantage of geographic position, we are in the habit of rising a little before you do in the morning; for every one will admit that it is absolutely necessary for the rest of the world to get up very early in the day to keep up with the leaders of the profession, who set the pace here in the "Buckeye State."

The spirit of the occasion impels me to speak of the importance and value to the medical profession of organization and association; but, standing as I am, in the presence of such a demonstration as I see before me, this grand illustration of a successful and influential association of scientific physicians, I need say nothing upon this subject. Any physician would deem it an honor to be counted worthy of fellowship with the representative men of the profession, who constitute the membership of the Ohio State Medical Society. Paraphrasing a familiar quotation, I might say: "If a monument were needed to testify to the advantages of medical organization, look around you; it is here!"

During the period corresponding to the life of the AMERICAN MEDICAL ASSOCIATION, to which I referred at the opening of my remarks, the medical profession of this country has certainly witnessed great and important changes. The standard of qualification has been elevated, the social and legal standing of the physician in the community has been advanced; and the profession has been united to an extent that half a century ago would have been considered beyond the bounds of possibility. By general consent, it is accepted as certain that the most potent and actively beneficial force in accomplishing so much in elevating the standard of medical education, of establishing State boards, and of uniting the whole profession into a great organization extending from Alaska to Florida and from Maine to Manila, has been the AMERICAN MEDICAL ASSOCIATION, the representative medical society of these United States of America.

Time will not permit me to do more than simply refer in passing to the magnificent work that is being accomplished by the ASSOCIATION, particularly through the agency of its weekly journal, which to-day is read by a greater number of educated physicians than any other scientific medical journal in the world.

It was suggested to me that my remarks on this occasion would find most favor with my audience if they were upon some subject connected with therapeutics. "All other medical studies," said Milner Fothergill, "are the foundation; Therapeutics is the superstructure." With your permission, I will ask your attention for a time to a brief consideration of "The Importance of the Recognition of Certain Blood-Changes, and Especially Toxemia, in Our Therapeutics."

Of late years much attention has been given to a study of the physiology and pathology of the blood. From the crude instruments and imperfect methods employed only a few years ago, we turn with pride and gratification to the improved equipment and perfect technic of the present day. We now, as a matter almost of routine, ascertain the percentage of hemo-

*Address delivered before the Ohio State Medical Society at Springfield, Ohio, May 11, 1899.

globin and determine the actual and relative richness of the blood in red and white corpuscles. By staining methods, we also determine the presence and proportion of hematoblasts and eosinophile cells, and observe other evidences of pathologic conditions. Examination of the blood for the malarial organism, or for the pathogenic bacteria, is now a part of regular clinic work. Simple and very practical methods have been devised and are in use for ascertaining the specific gravity of the circulating fluid, and for the determination of the proportion of iron which it contains. In view of all the improvements in our apparatus and technic, only a few of which I have mentioned, I think that you will agree with me that we are better prepared to take up the pathology and therapeutics of the blood at the present day than at any preceding period of the history of medicine.

Virchow is said to have declared that "disease has a material *ens;* it is the altered cell." But we know that, in many instances, the cause of the alteration of the cell is an antecedent change in its blood-supply, which has affected its nutrition and impaired the performance of its functions. We are therefore thrown back upon certain pathologic conditions, or constituents, of the blood, which must be changed or removed before healthy cell growth and normal metabolism can be reestablished. This may appear to you like a return to the old humoral pathology, but on the contrary, it is the most recent development of medical science. It is a result of the utilization of all the resources of modern medicine in the direction of the investigation into the causes of the phenomena of disease and of the means to be employed for its relief. We are reminded of the illustration given by a distinguished scientist, a few years ago, in speaking of another department of science. He said, in effect, that knowledge advances—not in a straight line, but as it were in a spiral, so that while the pendulum appears to swing back to a former position, it actually occupies a higher plane than it did before.

Accepting the old rule of practice embodied in the words *obsta principiis*, it becomes very evident that in our therapeutics it is of the highest importance to recognize the true nature of the alterations in the blood, which cause, or are attended by, cell disturbance. It is acknowledged that many of these alterations are at present beyond our means of recognition except through their effects. They may be provisionally divided into three classes according to their character:

1. Those in which there is a diminution or absence of certain principles of the blood, which are necessary for healthy cell-development and metabolism. In illustration, the instance occurs to me of the peculiar bodily disorder and mental impairment caused by the removal of the thyroid gland, thus depriving the blood of some important internal secretion necessary for health. The proof of this hypothesis is supplied by the process of induction pursued by Dr. Murray of Newcastle, England, who has shown us how to cure myxedema and allied conditions by the administration of thyroid glands of the sheep, or of the thyroid extract. When we treat anemia with iron, rickets with lime salts, scurvy with lemon juice, or neurasthenia with hypophosphites, this principle is followed of supplying to the blood certain proximate principles which are needed for healthy metabolism. We know that some individuals are naturally insusceptible to certain infections, and that everyone possesses a variable power of resistance to infectious diseases. Very recently, we have learned that this absolute, or comparative, immunity is due to the presence in the blood—we are not at present concerned with the question of how it gets there—of some constituent which we call for convenience, "antitoxin." You anticipate my argument, I am sure, that where the natural antitoxin is deficient and fails to protect the system, the introduction of antitoxin from a source without the body becomes a rational, therapeutic procedure. That this has been successfully accomplished in the case of diphtheria, we are all aware. With less success, but still with promising results, similar experiments in this field have been made and are yet in progress, in the treatment of erysipelas, tetanus, typhoid fever, tuberculosis of the lungs, plague, pneumonia, cholera and yellow fever. In the case of vaccination against smallpox, the conditions are not quite the same, for here it is sought by inoculating the system with vaccinia, to cause the body itself to supply such an increased amount of antitoxin against variola as will enable it to successfully resist exposure to infection of this kind.

2. Those in which certain principles, normally present in the blood, are in such relative or actual excess as to disturb metabolism. Illustrations of this are numerous. Diabetes, for instance, is a prominent one, since we all admit that there must be glycohemia before there can be glycosuria. The clinic manifestations of gout, lithemia and rheumatism, such as asthma, bronchitis, psoriasis, iritis and urinary disorders, we all take into account in our therapeutics. I need not discuss this point further in the presence of such an audience as there is before me to-day.

3. Those in which abnormal elements in the blood disturb cell action and cause manifestations of disorder, or symptoms of disease.

I will not now take up for discussion the effects of certain poisonous substances with which we are all familiar, such as lead, mercury, arsenic, or even alcohol, tea, or coffee, since we daily take them into consideration in prescribing for our patients. What I especially wish to direct attention to is the often overlooked consequences of the presence of those products of bacterial growth, which are absorbed into the blood, and are known by the general term of "toxalbumins" or "toxins." I am not now speaking of the familiar illustrations afforded by typic cases of infectious disease, such as the specific fevers; but of the more obscure cases, in which the connection between the cause and effect are less evident.

Thus we find that, in certain cases of indigestion, as pointed out by Lauder Brunton, from the mass of fermenting food, in the stomach or intestinal tract, certain poisons are absorbed by the blood, which give rise to symptoms popularly grouped under the general title of "biliousness," which includes loss of appetite, nausea, weakness, muscular pains and headache, depression of spirits, and so on. They are as "familiar as household words" to us all. How often have we found skin affections, such as eczema, caused or maintained by a similar condition of the digestive tract? The gastro-intestinal origin of toxins has now been demonstrated to exist also in tyrotoxicon (cream-puff, ice-cream, or custard) poisoning and also in botulismus or sausage poisoning. These symptoms are capable of being developed, under certain circumstances, therefore, by ordinary saprophytic bacteria. These are also cases of toxemia from common forms

of pus bacteria, the streptococcus and staphylococcus. Thus Dr. George H. Rohé, shortly before his lamented death, published a paper declaring his conviction that post-operative insanity is due to sepsis. A very remarkable instance has been recently reported, of a woman who had for years suffered with a lupus of the face which had resisted the usual methods of treatment. In this case the lupus underwent a spontaneous cure after removal of a Fallopian tube which was found to be distended with pus. When the source of the toxin was eliminated by removing the pus-tube, the natural antitoxin of the blood was apparently able to cope with the disease and to cure it. We recall, also in this connection, the curative effects that have been obtained in some cases of lupus from injections of tuberculin.

If we are asked more specifically about this peculiar quality of the bacteria, which we have termed virulence, and its relation to toxemia, we must confess that we only know that it exists and, as Pasteur has shown, that it is a variable quality; that is to say, that bacterial inoculation is not necessarily followed by bacterial infection or toxemia. The importance of this fact to us as physicians is very great, for, from the clinic standpoint, the difference between a virulent diphtheria bacillus and a non-virulent diphtheria bacillus is as great as the poles, or as Heaven is from Hades.

Directly in this connection there is a very interesting clinic fact to which I would like to call your attention. It is now finally established, by recent bacteriologic work, that air-borne bacteria of all kinds, including therefore saprophytic and pathogenic varieties, are constantly found in the nasal mucus and in the glandular tissue of the nasopharynx and tonsils. For instance, it has been shown that in cases of chronic rhinitis and tonsillitis, diphtheria bacilli may be found in the discharges, without being attended by the typic and characteristic symptoms of diphtheria. In such cases the bacilli do not seem to possess their full degree of virulence, or the system of the individual is possessed of a higher degree of resistance, so that the toxins are not produced in sufficient quantity to cause the profound toxemia which characterizes the disease that we call diphtheria. At the same time we must not assume that this quality may not, under favorable circumstances, be manifested, and we believe that such patients may communicate true diphtheria to susceptible persons who come in contact with them. The point which I wish particularly to make is that, although the diphtheria bacilli in such cases do not elaborate enough toxin to produce symptoms of acute poisoning, yet they *do produce a certain amount* of their peculiar poison, and this mitigated toxin, if you will, being constantly absorbed by the blood, is capable of causing ill health and cachectic conditions, including eruptions on the skin, especially in children. I feel warranted, therefore, in stating that in many otherwise unexplained conditions of anemia, neurasthenia, and impaired nutrition the cause will be found to exist in toxemia due to a chronic diphtheria infection of the upper air-passages. The remedy is a very simple one in this class of cases: all that is necessary to do is to disinfect the nose and throat, and correct the morbid condition of the blood.

The condition of icterus has an origin in the blood in a greater number of cases than has been hitherto supposed. We know that the introduction of certain chemic substances into the circulation will cause destruction of red blood-cells and, in consequence, the appearance of pigments of reduced hemoglobin in the blood, the tissues, and the urine. Two factors are necessary for the production of this form of jaundice, an excessive destruction of blood in the spleen and an impaired cell action in the liver. For example, after the administration to animals of poisonous doses of toluylhydrazin and metaphenylendiamin, both of which cause jaundice and icteric urine, the spleen is found to be very large and enormously charged with a golden yellow pigment. The portal vein and the capillaries of the liver are also highly colored by this pigment, carried over from the spleen, which is the organ of blood destruction. The liver cells are pale and in a state of fatty degeneration, but quite free from pigment. There is much pigment in the blood of the hepatic veins, and pigment granules are found in the secreting structure of the kidney. Thus granular pigment, which is brought to the liver from the spleen, is carried over into the general circulation and, undoubtedly, pigment existing in a soluble form in the blood plasma is also carried over. Thus we see that, under certain circumstances, the pigments of reduced hemoglobin, including bilirubin, will be carried beyond the liver into the general circulation staining the tissues, discoloring the urine, and bringing about a true hematogenous jaundice. This corresponds to the jaundice due to the absorption of the decomposition products of a large extravasation of blood, as Virchow has shown, that the hematoidin is in this case identic with bilirubin. In cases of low fever, therefore, accompanied by swelling of the spleen, and destruction of red blood-cells, we may have absorption of the pigment from the reduced hemoglobin, followed by the development of jaundice, and yet the liver and bile-passages be unobstructed.[1] In such cases our therapeutics should be directed to the blood and the spleen rather than the liver and intestinal tract.

Albuminuria is likewise occasionally due to toxins or to certain products of waste which accumulate in the blood. In such cases the kidneys may be free from disease and the albumin will disappear from the urine when the blood is restored to a healthy condition. In the albuminuria of pregnancy, for instance, it is a common observation that the symptom is relieved by the induction of premature labor. In an instance reported[2] some years ago disease of the liver and kidneys of the fetus preceded the appearance of albuminuria and general anasarca in the mother, thus affording a unique instance of the production of Bright's disease of the kidneys through some toxic substance circulating in the blood, because there was no direct connection between the mother and fetus except the blood in the placental sinuses. Some years ago Drs. DaCosta and Longstreth[3] showed that in certain cases of Bright's disease there was disease of the nervous ganglia, especially of the abdominal plexus of the great sympathetic. It would seem probable, or at least possible, that previous to the disease of the nervous ganglia, there had occurred some change in the blood affecting their nutrition, in the manner such as we have just been engaged in considering.

I shall not stop to discuss at greater length how much the recent views to the pathology of the blood

[1] Auld: British Med. Jour., Jan. 18, 1896.
[2] Grimshaw: Liverpool Medico-Chir. Jour., January, 1895.
[3] Am. Jour. of the Med. Sci., Phil., 1880, V. S., lxxx, p. 17.

and especially the presence of toxins elucidate other vexed questions in clinic medicine, nor shall I have time to point out in detail the numerous therapeutic applications that may be made of it. It is a very old truth that *Kee Nephesh Habassar Baddom*, "The blood is the life of the flesh," and modern science fully confirms it.

Susceptibility to infection is the reverse of immunity, and appears to be due to the absence from the blood of certain protective constituents, called antitoxins, just as immunity is maintained by their presence. This is an inviting field for further study. Promising results have been obtained, as I have already stated, in a number of diseases. Experiments have also been made in the field of surgery, in the prevention of suppurative processes, and also in the treatment of malignant growths. Dr. Coley of New York has obtained remarkable successes in treating inoperable sarcomas by the use of cultures of the bacillus prodigiosus and of the streptococcus and it is hoped that shortly there may be announced the discovery of a successful treatment for cancer by the adoption of similar methods. The uniform failure of experiments in which it was sought to inoculate animals with cancer would indicate that the exciting cause of carcinoma does not reside in the lesion itself, but is remote from it. In other words, it is due to a disturbance of nutrition which may be explained by the presence in the blood of some toxin.

I will leave this subject for your consideration and will conclude with a single remark, which has a direct bearing upon practical therapeutics. The recognition of the rôle played by toxins in producing disease and of the therapeutic value of antitoxins and organic extracts of various kinds, has placed in our hands a new class of remedies. Some, like diphtheria antitoxin, and thyroid and suprarenal extracts, have already obtained an established place in our medical armamentarium; others such as tuberculin, and cultures of streptococcus, mallein, bacillus prodigiosus, etc., are still on trial. In the near future there is no doubt that their number will be greatly increased.

I would suggest that, owing to the difficulty of ascertaining, or establishing, a standard of activity, or potency, for this class of remedies, some supervision by the profession, or by the government, should be held over their manufacture and sale, just as in the case of dairy products and vaccin It is extremely important that these peculiar remedial agents should be supplied to the profession of standard quality and uniform strength and entirely free from tubercle bacilli or other infectious material.

In a recent address delivered at Chicago, Governor Roosevelt of New York spoke eloquently of a form of bodily and mental activity, which he characterized by the apt title of "strenuous life." To the possession of this, either by a nation or an individual, he would directly attribute the secret of success. He also declared that the great need of the community and country is cultivated men and that cultivated men need character. In his opinion a man who looks forward to a life of mere selfishness is not respectable, and no man is to be excused from doing his share in working for the common good. Whether or not the distinguished speaker had the members of the medical profession in his mind when he uttered these words, I know not, but I am convinced that the physician more than any other in the community works for the common good; he is unselfish, he has both culture and character, and in his daily work he demonstrates the value of that "strenuous life" to which reference has just been made. The degree of success he has obtained in this commonwealth could find no more forcible demonstration than I find represented in this audience before me to-day.

Original Articles.

HEN'S EGGS IN INFANT FEEDING.*

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CHICAGO.

No apology is necessary for the introduction of the subject of substitute feeding of sucklings. If any one should question the importance we have merely to point to the mortality statistics in bottle- and breast-fed babies. The host of substitute foods and preparations on the market is sufficient evidence of their inutility and, even though the clinic evidence were wanting, our knowledge of their composition and the physiologic requirements of infant digestion would lead us to discard a great majority. After experimental excursions along other lines, the tendency in America is to accept the milk of cows, goats and asses as the most available substitute, containing all the elements of infant nutrition in nearly normal proportions. Cow's milk has become more popular since the elaboration of the hygienic dairy system and the aseptic precautions in the care of the milk. Especially is milk popularized in localities where laboratories (such as the Walker-Gordon) are established for the modification of the milk or the regulation of the percentages of its components. The approximate analysis of mother's milk has been rendered easy by the Babcock method and later improved, I think, by Leffmann and Beam, and these facilities for modification have led us back to the cow's milk not only for infants deprived of the breast but also for sucklings when the maternal supply shows marked deficiency in some important constituent.

With all due appreciation for our advance in hygienic dairies and milk laboratories, I, with many others, have frequently found cases in which no modification of cow's milk whatever met the requirements of the case. The troublesome cow casein, like Banquo's ghost, would not down until so reduced in percentage that innutrition from absence of albuminoids resulted. It has not been difficult to prepare synthetically an emulsion which contained all the elements of nutrition found in mother's milk. The greatest difficulty is found in the inability of the infant to digest the albuminoid containing so large a percentage of cow casein.

The employment of egg albumin to supply the necessary proteid in infant food is by no means a new idea nor original with the writer, but he believes too little attention has been given to egg as a substitute for the indigestible proteid of cow's milk. The food value of hen's egg seems to have been appreciated for many centuries and in the Chronicles of Froissart dried eggs powdered and rammed in barrels are mentioned among the stores of provisions laid up by the king of France for the invasion of England in 1386.

*This paper embodies one presented before the Pediatric Section of the XII International Congress, at Moscow, August, 1897.

Physiologists are in general agreed as to their food value, and the desiccated egg of commerce is now a well-known staple. Long before the writer began his observations in this line of feeding, many contributions were made to the literature on the subject. In many cases, however, the egg albumin mixed with water was resorted to only in cases of extreme gastro-intestinal intolerance of other forms of nourishment and was discontinued upon the subsidence of acute symptoms. By others, standard preparations containing egg were recommended and in some instances patented as the best food for babies. The incompleteness of the food in the former class of cases and the inadaptability of the arbitrary formula to the varying requirements of different patients in the latter account for the limited adoption of this article of diet.

In discussing this subject I have met with the following objections to the use of egg: 1, scarcity; 2, unsoundness or instability; 3, coagulability, and 4, expense.

No one will deny that the geographic distribution of available ovipara is more wide-spread than that of mammalia whose milk is suitable for infants. As to unsoundness, does any one suspect that the newly laid egg harbors the infection which is so frequently found in fresh milk? Handle the egg with but half the hygienic precautions which now attend the manipulation of milk and it will prove much superior in its soundness and freedom from germs of infection and decomposition.

To the objection to the egg because of its ready coagulability at a somewhat low temperature, I reply that high temperature is not more essential in the use of aseptic egg in baby food than in that of sterile milk. It has been sufficiently demonstrated, I believe, that when the milk-supply is properly guarded by sanitary precautions sterilization or even pasteurization is worse than useless, because it lessens the food value. But for those who still prefer pasteurization, I will state that a solution of egg white in milk, properly strained and alkalinized can be pasteurized without coagulation.

The objection as to expense is wholly without foundation in fact. I will not take the time to prove that a given quantity of assimilable proteids suitable to infant digestion and nutrition may be obtained with greater economy from eggs than from milk. It is readily susceptible of demonstration. Furthermore, as to the relative expense of securing immunity from contact infection in eggs and milk, the showing is overwhelmingly in favor of the former.

Let it not be understood from the foregoing that I prefer egg to milk as a food in its entirety, or that I would drive the cows away from the babies with a flock of hens. I believe a good nutrition may be maintained in nurslings by a proper combination of ingredients, such as olive-oil, grape sugar and egg white, with the requisite proportions of sodic, potassic and phosphatic salts in aqueous solution; or that some of these essentials may be obtained from starch, from cereals by a proper action upon their starch and a proper solution of their gluten and salts; or from meats rich in proteids properly abstracted. Many of these efforts at substitute feeding—peptonization, pancreatization and partial predigestion have proved successful in certain especial cases. Still it is not my purpose to inveigh against the use of milk. On the contrary, I consider cow's milk as the most accessible source of most of the constituents of baby food and believe it should be made the basis from which by proper modification we may prepare an emulsion to meet the requirements of any particular case. It is to the use of the easily assimilated albumin obtained from the hen's egg in place of the indigestible cow casein that I desire especially to call attention. As I stated above, we have in the leading cities of America, as Boston, New York, Chicago, Montreal, Philadelphia, St. Louis, Baltimore, etc., adopted the practice, inaugurated largely through the energy of Professor Rotch of Boston, of using the milk laboratory, through which we order by definite prescription—as from a pharmacy—the exact amount of food and the percentage of ingredients required for each nursling.

In visiting the Continent, en route to the International Congress at Moscow, I was disappointed in not meeting with these milk laboratories. The nearest approach to them that I saw were the Radlitz Dampf Molkerei in Prague; Professor Baginski's efforts in his Molkerei in Berlin; the numbered and labeled milk bottles in Professor Heubner's wards at the Charité, and Professor Monti's efforts at modification at the Vienna Molkerei. But in none of these, nor elsewhere in Europe, did I see our new American practice of prescribing the exact percentage of leading constituents for each case. To be more explicit, we write a prescription as follows:

℞.	Fat	3 per cent.
	Milk sugar	7 "
	Albuminoids	1.5 "
	Mineral matter	.15 "
	Total solids	11.65 "
	Water	100 "
	Number of feedings	8
	Amount at feeding	℥ iiiss
	Infant's age	3 mos.
	Infant's weight	13 lbs.
	Alkalinity	5 per cent.
	Heat at	ad 160 F.

Ordered for baby. . . . . .

Signature . . . . . M.D.

Date. . . .

This is sent to the laboratory and filled daily until from the varying needs of the case, a change is ordered by the physician as to the percentage of some ingredient. A few of us have ordered, in some instances, well-cooked cereals in the form of jellies of starch, oatmeal, barley, etc., to be incorporated in the emulsion. Having for a number of years experimented with egg combination in infant feeding, I encouraged the advent of the milk laboratory as the best means of carrying out the idea of substituting egg white for the indigestible curds of milk casein. My case records both in hospital and private practice afford increasing encouragement and I find objectionable features raised by some observers, namely, flatulency and bad odor of stools, subside when the quantity of egg is modified to meet the requirements of the particular case.

Concerning the subject announced on the program of the congress, and only known to me on my arrival in Moscow, I will state I never substitute artificial for natural feeding without some substantial reason for so doing.

As to the infant, a loss of weight, even failure to gain for a week, or any evidence of indigestion or malnutrition calls for an immediate examination of the breast milk, as to quality and quantity, which usually reveals the cause of the disturbance. In hospital practice, as in the maternity wards of the Pres-

byterian hospital of Chicago, the breast milk is analyzed twice each week in all cases and the result enared with the daily records of each infant's growth nd nutrition. Should there be any marked evidence of disturbed lactation, substitute feeding is resorted to temporarily until the breast milk is improved by special care as to the hygiene and therapy. In the event of failure, the infant is kept permanently on the artificial combination best suited to its requirements.

The statistics from my records are still favorable to natural feeding. However, we must admit some advantages of the artificial methods, such as uniformity of food, regularity of supply, the facility with which changes in diet may be made, both as to quality and quantity, in gross or in detail, and the exemption from disturbances—emotional, temperamental, physiologic and psychologic. This, with our increase in knowledge of infantile physiology and hygiene, bids fair in the near future to raise artificial feeding more nearly to a par with natural feeding.

A MODIFIED SIEGLE'S, PNEUMATIC, AURAL SPECULUM.*

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The modified Siegle pneumatic aural speculum is practically a Gruber speculum made of metal, to which is fitted the glazed lid that transforms it into the Siegle

Burnett's modification of Siegle's pneumatic aural speculum; natural size.

pneumatic speculum. Its extreme length is 5.5 cm., and its diameter at its meatal end is 6 mm. in vertical, by 4 mm. in transverse diameter. This renders it more adaptable to the shape of the meatus. It is nickel-plated both within and without, which gives it a better reflecting surface than possessed by the black-rubber Siegle instrument found in the shops. The two small openings on its inner wall, at the point connecting it with the air-tube, act like a sieve, to prevent the drawing up of particles of cerumen or dirt into the operator's mouth—another advantage over the ordinary Siegle instrument. The attachment for the air-tube is in the long axis, causing a downward curve of the rubber tubing, and preventing a kinking of this, which sometimes occurs in old forms of Siegle with the attachment in the transverse axis. The chief advantage, however, lies in the meatal end of the speculum. The outside of this end is made to rapidly widen for a distance of a centimeter from the end to a diameter of 11 mm. vertically, and 10 mm. transversely, thus giving a graduated end fitting hermetically into any adult meatus without the addition of rubber packing or replacing of another speculum with a smaller or larger diameter, as in the usual forms of the hard-rubber Siegle.

A metal speculum similar to this one, made in Paris, but without nickel-plating and the modified graduated meatal tip, I have used for many years. The addition of the graduated tip I believe to be original with myself, and the instrument as illustrated has been made from my own pattern, by Charles Lentz & Sons of this city.

With a Siegle pneumatic speculum, operated by the surgeon's mouth as the pneumatic power, one can not only *masser* the membrana tympani and the ossicles of hearing, with greater or less force as required, watching the effects on the circulation of the drumhead through the glazed outer end, but also exercise and *maintain* rarefaction of the air in the canal, drawing outward the membrana, and thus make and maintain *traction on the tensor tympani*. This latter maintained result can not be obtained by any other instrument.

The tensor tympani is covered by a fibrous sheath, considered by Helmholtz to be a continuation of the periosteum, lining the muscular canal in the bony portion of the Eustachian tube, from which it arises. We can thus explain the early participation of this muscle and tendon in catarrhal and arthritic processes in the nasopharynx, Eustachian tube and middle ear. Therefore, we can understand why one of the earliest symptoms of chronic catarrhal otitis media is contraction of this muscle and its tendon, with consequent retraction of the membrana tympani. With such retraction of the membrana tympani there are usually associated varying degrees of tinnitus aurium and impaired hearing, at first directly traceable, largely if not entirely, to the retraction of the membrana and ossicles. Later on, if this retraction is not overcome, there are vascular changes in the ossicles and tympanic walls, with ankylosis of the ossicles and impaction of the stapes in the oval window.

In such cases, in addition to the treatment of the nasopharynx, it has been customary to inflate the tympana in various ways. But no form of inflation ever improves the hearing, relieves the tinnitus, and gives a sensation of openness to the ear, equally as well, as agreeably or as promptly as maintained rarefaction of the air in the external auditory canal by means of Siegle's pneumatic speculum. Patients always dislike all forms of inflation of the tympana, and all kinds of inflation of the drum cavities are more or less septic, and positively contraindicated, if the nasopharynx contains morbid secretions. Furthermore, all forms of inflation excepting catheterization of the Eustachian tube are applied, *nolens volens*, to both ears, whereas pneumatic massage is applied to only one ear, as required. All forms of inflation of the tympana are in the nature of shocks, and the ear often aches, or at least feels fuller, after inflation, than it did before the interference. Air thus thrown into the middle ear falls on the inner wall and the fenestræ, not made for the direct impact of air, as forcibly as upon the inner side of the membrana. In this way the membrana and the malleus are forced outward and away from the incus and stapes, while the latter may be forced farther inward in the oval window and made to press unduly upon the labyrinth fluid. We can thus explain the dizziness often produced by inflation of the tympana. The membrane of the round window is also thus unduly inflated and forced inward, and the natural compensa-

*Read in the Section of Otology and Laryngology of the College of Physicians of Philadelphia, April 19, 1899.

tory yielding of the last-named membrane, to the impaction of the stapes upon the labyrinth water, temporarily abrogated, a fact rendering dizziness all the more likely to occur. For these very good reasons, the use of Siegle's pneumatic speculum in the external ear has nearly replaced in my hands all forms of tympanic inflation.

URETHRAL DISEASE AND MARRIAGE.*

BY FREDERICK W. ROBBINS, A.M., M.D.
DETROIT, MICH.

One who has followed the literature of pelvic surgery for the last few years has no doubt come to believe that the great majority of cases of salpingitis and allied diseases are of gonorrheal origin. One need not have practiced medicine for a long time before having under his care patients who give a history of perfect health before marriage, but that event has ushered in discomfort, distress even, to the extent of practically rendering one unable to cope with the duties of life. Life has lost its charm; there is no home; sexual life is repulsive or impossible; children do not come to brighten the family life; love itself is fast ebbing away, and both husband and wife are beginning to wish that the marriage contract had never been entered into. The wife in her innocence does not think to question her husband's virtue, and the husband is very likely one of the many who, at marriage and even long before, have been true to the women of their choice. Within the month I have seen such a case. The lady has since been rightly operated on and although in all probability she will hereafter enjoy comfortable health, that home will ever be childless. I well know that there are many other cases to which nearly these same words can be applied, namely, the cases of early abortion which so many women think a sinless and comparatively harmless matter, but of those I am not speaking at this time.

The question immediately comes up, who is responsible for injury suffered by this large class of innocent women? It certainly is true that no man would willingly infect his wife with gonorrhea, even if he had no adequate conception of the far-reaching results of such infection. Many young men look upon gonorrhea as a simple disease, which, as they grow older and thus more ripe with experience, and especially if the question of marriage presents itself to them, becomes a more serious matter. Many a man having had gonorrhea no doubt marries without having consulted a physician as to the propriety of that step, and very likely has never been treated by one for his difficulty. Then if this be so, we must admit that the medical profession is not entirely to blame for the disease with which the young wife is infected, yet I can but feel that as a profession we should feel the shame of the present state of things and should consider ourselves directly and indirectly responsible for much of the disease of pelvic organs in recently married women, as well as those not recently married. Indirectly responsible I say, because is it not a fact that many of us are not doing our duty in educating the patients who come to us for treatment? Are we not too often satisfied in bringing the case to what seems to be a cure, without advising the patient of the dangers which may be before him? Are we not sometimes willing that the many relapses which follow should be credited to renewed infection rather than to our responsibility for having discharged a case uncured? To be sure in this way we have kept up our reputation of being able to cure urethritis, but we can not blind our consciences to the fact that many such cases are not well, and from these cases spring more suffering. We are directly responsible when we discharge patients from treatment or make so light of their condition that they discharge themselves, before we know or are reasonably certain that germs of infection have disappeared.

In the JOURNAL, April 22, there is a short article by Dr. Greenberg of Milwaukee, on "Recurring Gonorrhea." He reported a case where he began treatment of gonorrhea July 2, 1898, and discharged the patient cured in a month. The patient was instructed to abstain from use of alcohol and not to marry for one year after discharge had disappeared, had no further trouble and married March, 1899, and a week later had purulent discharge containing gonococci, as also did his wife, whom the doctor had treated previous to marriage and knew to be uninfected.

Such is the history of many a case, and I wish to find fault with the manner of conducting this case, as it is an example, I believe, of the way very many cases are handled. The doctor does not say how he satisfied himself that the patient was well, therefore we can say little upon that point; but he does distinctly say that the patient must abstain from alcohol in every form, and thereby admits his fear that the patient is not free from disease. The point that I am urging with all the force that I know how is, that we should know that a patient is cured, before discharging him. When no gonococci have been discovered for say two weeks, repeated examinations having been made, when no pus-threads or commas have been detected in the first morning's urine; when the centrifuged urine shows no sediment containing gonococci, we have a right to say that, in our opinion, the patient is well; but then should we say to the patient, "Now, abstain from alcohol?" By no means, except on the general ground of belief in abstention; but rather the plan should be adopted of producing urethral congestion and thus stimulate to action any lurking microbes that may be hiding under any epithelial cell. It is better to know that they are there than to pat ourselves on the back at the rapid recovery of the case, until, as in the instance reported, husband and wife are suffering distress of both body and mind.

The second point that I would criticize in this paper is the advice to refrain from marriage for a year. If the patient has not the germs of disease within himself why refrain from marriage for any long period of time? If this patient had been allowed beer and champagne in excess, or if an instillation of nitrate of silver solution had been given at the time the patient was discharged cured, the latent germs would have developed just as they did after excessive intercourse. If a simple inflammation had been produced, no gonococci would have been found in the discharge, which would have subsided in a few days.

In conclusion, a cessation of gonorrheal discharge is no sign that the disease is well. A chronic anterior or posterior urethritis may exist for months after such discharge has ceased. In Dr. Ferd C. Valentine's office recently, I saw a patient who gave a clear

*Read before the Michigan State Medical Society, May 4, 1899.

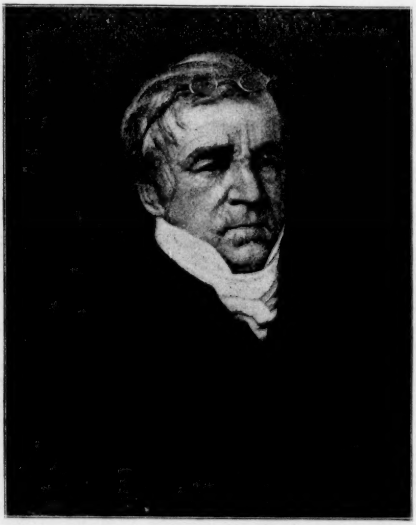
history of having had gonorrhea for the last time, thirteen years ago. He was astonished when gonococci were demonstrated to him. The two-glass test must be made, if possible, to discover any form of discharge. The centrifuge should be resorted to in all doubtful cases. Indulgence in alcoholics, especially beer and champagne, should rather be advised than not. The urethra should be irritated by chemic means. If, after all these precautions are taken, no gonococci have been discovered by a painstaking and competent microscopist, the patient may be allowed to marry at his own discretion.

73 Cass Street.

"Looking Backward."

EX-PRESIDENTS OF THE AMERICAN MEDICAL ASSOCIATION.

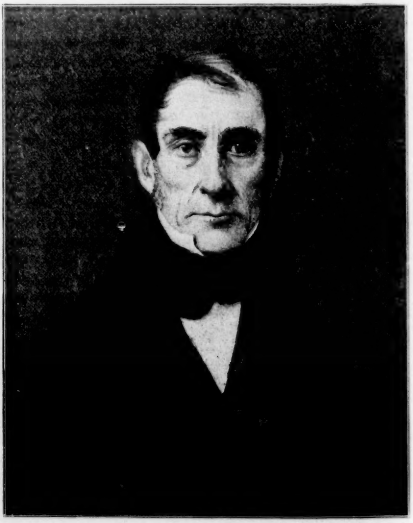
On May 7, 1847, the national convention of delegates from the medical societies, medical colleges and other organized medical institutions in the United States, then in session in the city of Philadelphia, formed the AMERICAN MEDICAL ASSOCIATION by unanimously adopting the following resolution: "*Resolved*, That this convention do now resolve itself into the AMERICAN MEDICAL ASSOCIATION, and that the officers of the convention continue to act as officers of the ASSOCIATION until others be appointed."



NATHANIEL CHAPMAN.

The ASSOCIATION then proceeded to the election of officers, and Dr. NATHANIEL CHAPMAN of Philadelphia was elected president for the ensuing year by unanimous vote, after having been nominated by a committee of one from each State represented in the ASSOCIATION. Dr. CHAPMAN was born May 28, 1780, in Summer Hill, Fairfax County, Va., and died July 1, 1853, in Philadelphia. At the time of his election he was nearly 73 years of age, with hearing and sight too much impaired to allow him to efficiently perform the duties of the presiding officer of a large assembly. But he was at the head of the faculty of the medical department of the University of Pennsylvania, with which he had been connected many years, and he was chosen because his name and high reputation would add strength and character to the newly organized ASSOCIATION. On being conducted to the chair by the chairman of the nominating committee, he returned sincere thanks for the honor conferred, soon after which the ASSOCIATION adjourned to meet in Baltimore, Md., May 2, 1848. When the ASSOCIATION met in Baltimore, he called the meeting to order, delivered a brief and characteristic address, and left the meeting in charge of the first vice-president, Dr. JONATHAN KNIGHT of New Haven, Conn.

During the second day of the meeting of the ASSOCIATION in Baltimore, Dr. ALEXANDER H. STEVENS of

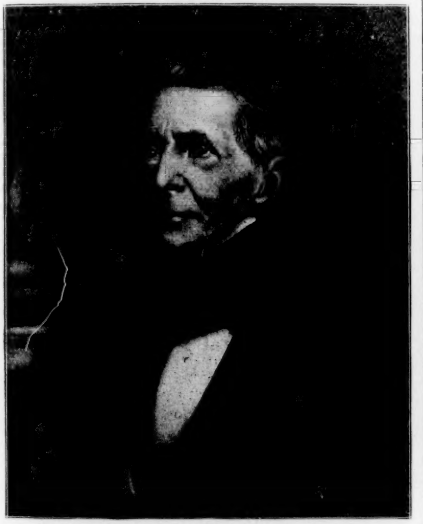


ALEXANDER H. STEVENS.

New York was elected president, and on being conducted to the chair by the chairman of the nominating committee, he not only expressed his thanks for the honor conferred upon him, but he spoke briefly and eloquently of the nature and objects of our profession and of the ASSOCIATION. Of the first he said: "Our profession, gentlemen, is the link that unites science and philanthropy. It is one of the strongest ligaments that binds together the elements of society. It teaches the rich their dependence, and elevates the poor to a sense of the innate dignity of their nature. Its aim is to add to the comfort and length of human life." Dr. STEVENS was born in New York City, Sept.

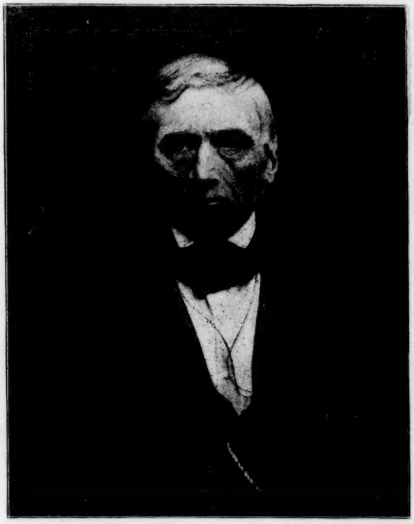
4, 1789, and died in the same city March 30, 1869. At the time of his election to the presidency of the ASSOCIATION he was president of the faculty of the College of Physicians and Surgeons of New York, and emeritus professor of surgery in the same institution.

The second anniversary meeting of the ASSOCIATION convened in Boston, Mass., May 1, 1849, with the president, Dr. STEVENS, in the chair. On the same day, by the recommendation of the nominating committee, Dr. JOHN C. WARREN of Boston was elected president of the ASSOCIATION, and was cordially welcomed to the chair by his predecessor in the office. JOHN COLLINS WARREN was born in Boston, Mass., Aug. 1, 1778, and died in the same city May 4, 1856. At the time of his election to the presidency of the ASSOCIATION he had passed his three score years and ten, and was too much enfeebled for an efficient presiding officer. But his selection was on the same principle that governed in the case of Dr. CHAPMAN. Dr. WARREN had long been the professor of surgery in the medical school of Harvard, and the leading surgeon in the New England States.



JOHN C. WARREN.

The third annual meeting of the ASSOCIATION commenced its sessions in Cincinnati, Ohio, May 7, 1850, with the president, Dr. WARREN, in the chair. As soon as the ordinary preliminary business had been transacted, a committee of one member from each State represented at the meeting was appointed to nominate officers for the ensuing year. Assuming that the president would be selected from the city in which the meeting was to be held, the profession in Cincinnati became early divided into two parties, one in favor of electing Dr. DANIEL DRAKE, and the other in favor of Dr. REUBEN D. MUSSEY, both being men of very high reputation both as teachers and writers. After a warm contest waged by their respective friends before the nominating committee, the latter reported during the afternoon session recommending the election of Dr. REUBEN D. MUSSEY, and the recommendation was adopted by the ASSOCIATION, though not by unanimous vote. Dr. REUBEN DIMOND MUSSEY was born in Pelham, N. H., June 23, 1780, and died in Boston, June 26, 1866. At the time he was elected president of the ASSOCIATION he was professor of surgery in the Ohio Medical College, and had been well known as a teacher of anatomy and surgery for forty years. Owing to age and feebleness of voice, Dr. MUSSEY, after thanking the ASSOCIATION for the honor conferred upon him, left the chair to be occupied by the vice-president. In 1860 he retired from all professional work and removed to Boston, where he died at the age of 86 years.

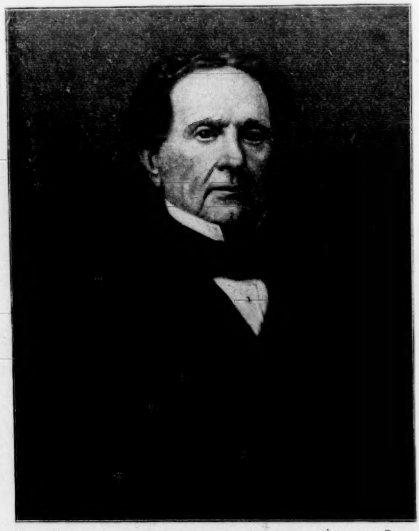


REUBEN D. MUSSEY.

The fourth annual meeting of the ASSOCIATION was held in Charleston, S. C., commencing May 6, 1851, Dr. MUSSEY in the chair. During the afternoon session the nominating committee reported, recommending the election of Dr. JAMES MOULTRIE of Charleston, S. C., president for the ensuing year. The recommendation was adopted, and Dr. MOULTRIE was cordially welcomed to the chair by his predecessor and in return expressed his thanks for the honor conferred. JAMES MOULTRIE was born in Charleston, S. C., March 27, 1793, and died in the same city April, 1869. He had received a liberal education, was a zealous student of natural history and was professor of physiology in the Medical College of South Carolina.

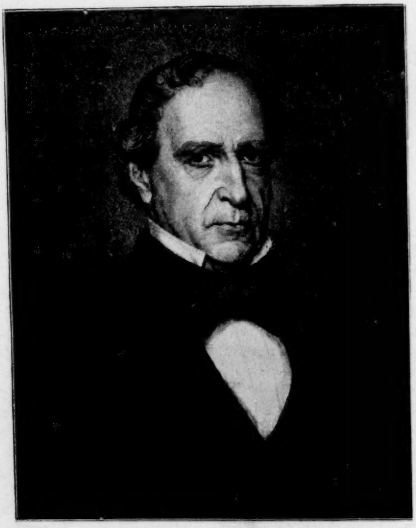
The fifth annual meeting of the ASSOCIATION was

held in Richmond, Va., commencing May 4, 1852, the president, Dr. MOULTRIE in the chair. After the



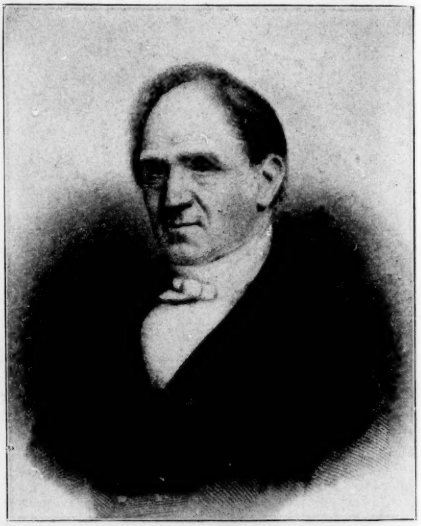
JAMES MOULTRIE.

usual preliminary work was completed, on the recommendation of the nominating committee, Dr. BEVERLY RANDOLPH WELLFORD of Richmond, Va., was elected president and conducted to the chair. He continued to preside during the annual meeting with dignity and ability. He was born in Fredericksburg, Va., July 29, 1777, and died in the same city Dec. 27, 1870.



BEVERLY R. WELLFORD.

The sixth annual meeting was held in the city of New York, commencing May 3, 1853, and was called to order by the president, Dr. B. R. WELLFORD of Virginia. It was in that city, seven years previously, that the first national medical convention was held, and performed the preliminary work resulting in the organization of the permanent ASSOCIATION the following year. The nominating committee found the local profession, as at the meeting in Cincinnati, divided, one part advocating the nomination of Dr. VALENTINE MOTT, and the other part equally zealous for Dr. JOHN W. FRANCIS, both men of the highest standing in the

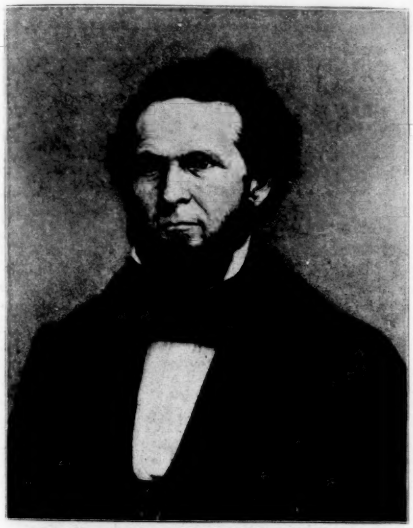


JONATHAN KNIGHT.

profession. After listening to the arguments on both sides, the member of the nominating committee representing Illinois claimed that the precedent electing the president from the city in which the meeting was being held, was not only tending to beget local partisan factions, but would unjustly restrict the selections to such of our larger cities as could accommodate the annual meetings, while those residing in less populous cities would be excluded, however meritorious they might be. He further reminded the committee that neither of the eminent men named in New York had ever taken any part in the work of the ASSOCIATION, while Dr. JONATHAN KNIGHT of New Haven, Conn., had presided over both of the preliminary national conventions with admirable skill and urbanity. During the afternoon session of the ASSOCIATION the nominating committee recommended the

election of Dr. JONATHAN KNIGHT, Connecticut, and he was unanimously elected and conducted to the chair. He was born in Norwalk, Conn., Sept. 4, 1789, and died in New Haven, Conn., Aug. 25, 1864. He was professor of surgery in the medical department of Yale University for twenty-six years.

The seventh annual meeting of the ASSOCIATION was held in St. Louis, Mo., commencing May 2, 1854. In the absence of the president, Dr. KNIGHT, the meeting was called to order by the first vice-president, Dr. USHER PARSONS of Rhode Island, and on the recommendation of the nominating committee, Dr. CHARLES A. POPE of St. Louis, Mo., was elected president for the ensuing year. Dr. Pope was born in Huntsville, Ala., March 15, 1818, and died suddenly in Paris, France, July 5, 1870. He became a resident of St. Louis in 1842, and professor of surgery in the medical department of the University of St. Louis in 1847.



CHARLES A. POPE.

The eighth annual meeting convened in Philadelphia on May 1, 1855, and after the usual preliminaries, elected Dr. GEORGE B. WOOD of that city president for the ensuing year. GEORGE BACON WOOD was born in Greenwich, N. J., March 12, 1797, and died in Philadelphia, March 30, 1879. He was first professor of materia medica and pharmacy in the medical department of the University of Pennsylvania, and was later transferred to the chair of practice of medicine, from which he retired to private life in 1860. During the forty-two years that he was actively engaged, both as a teacher and writer, he became more widely known and esteemed than any of his contemporaries, for his work on the "Practice of Medicine" was the leading text-book for many years.

The ninth anniversary meeting of the ASSOCIATION was held in Detroit, Mich., May 6–9, 1856, the president, Dr. WOOD, in the chair. On the recommendation of the nominating committee, Dr. ZINA PITCHER of Detroit was elected president for the year, and Dr. WOOD delivered his valedictory address, in which he commended the "Code of Medical Ethics," and made a just protest against the practice of calling members of the profession "allopathists." Dr. ZINA PITCHER was born in Sandy Hill, N. J., April 12, 1797, and died in Detroit, Mich., April 5, 1872. After acquiring a good academic education, he graduated in medicine at Middlebury College, Vt., in 1822. He entered the medical staff of the U. S. A., and was in military service several years, when he resigned and became a resident of Detroit. He was an active member of the board of regents of the University of Michigan from 1837 till 1852. He presided with dignity and intelligence.

The tenth anniversary was held in Nashville, Tenn., May 4, 1857, and after the usual preliminaries Dr. PAUL F. EVE of Nashville was elected president and duly conducted to the chair. In returning thanks for the honor conferred on him, he closed as follows: "You present again the sublime spectacle of brethren from all sections of this widely extended Union, congregated to devise the best means to relieve suffering humanity, and may I not add we are here with

> Our souls by love together knit,
> Cemented, mixed in one;
> One hope, one heart, one mind, one voice?"

Dr. PAUL FITZSIMMONS EVE was born near Augusta, Ga., June 26, 1806, and died in Nashville, Tenn., Nov. 3, 1877. He received a liberal education and early acquired a high reputation both as a practitioner and teacher of surgery. He was a man of great industry, energy and regularity of habits. It is stated by his biographer that he never used tobacco in any form nor any variety of alcoholic drinks, and enjoyed uniformly good health, but died suddenly at the bedside of a patient whom he had visited early in the morning.

The eleventh annual meeting of the ASSOCIATION was held in Washington, D.C., May 4, 1858, the president, Dr. EVE, in the chair. Dr. HARVEY LINDSLY of Washington, D. C., was elected president. He was born in 1804 and died in Washington, April 28, 1889. He was one of the founders of the Medical Society of the District of Columbia, and for several years professor in the National Medical College. His valedictory address, delivered at the opening of the next annual meeting, is one of the best on the records of the ASSOCIATION.

The twelfth annual meeting was held in Louisville, Ky., commencing May 3, 1859, and Dr. HENRY MILLER of that State was duly elected president for the ensuing year. Dr. MILLER was born in Glasgow, Ky., Nov. 1, 1800, and died in Louisville, Feb. 8, 1874. He was professor of obstetrics in the medical department of the University of Louisville, and acquired a good reputation, both as a teacher and writer.

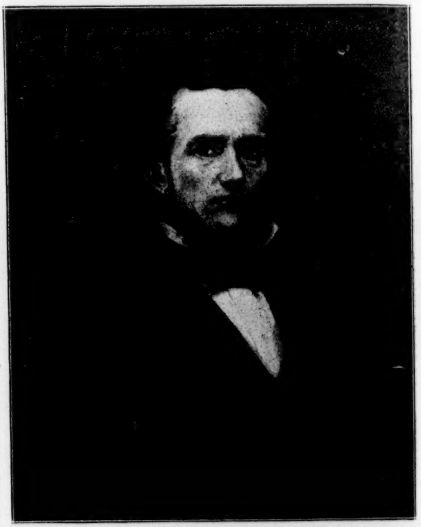
The thirteenth annual meeting of the ASSOCIATION was held in New Haven, Conn., commencing June 5,

1860, the president, Dr. HENRY MILLER, in the chair. On the recommendation of the nominating committee, Dr. ELI IVES of New Haven was elected president and duly conducted to the chair. He accepted the office and tendered his thanks for the honor conferred, but on account of age and infirmities, he requested the first vice-president, Dr. WILSON JEWELL of Philadelphia, to preside during all the sessions. Dr. ELI IVES was born in New Haven, Conn., Feb. 7, 1779, and died in the same city, Oct. 8, 1861. He was a graduate of Yale and one of the founders of the medical department of that institution. He filled the chair of materia medica sixteen years, and then was transferred to the chair of practice of medicine. Vice-President JEWELL was a good presiding officer and discharged all duties of the president with marked ability. The meeting in New Haven was the first at which the afternoon sessions were held in sections and devoted strictly to literary and scientific work.

The fourteenth annual meeting of the ASSOCIATION was to have been held in June, 1861, but the great Civil War between the North and South commencing in March of that year, the meeting was postponed until June 2, 1863, when it assembled in Chicago, with Vice-President WILSON JEWELL of Philadelphia in the chair. Of the fourteen presidents previously chosen all but two had been selected from the profession of the cities in which the meetings had been held, and in consequence there was a general expectation that either Dr. DANIEL BRAINARD or Dr. NATHAN S. DAVIS would be elected at the meeting in Chicago. But Dr. BRAINARD, being interested in a canal convention, ignored the medical meeting altogether, and Dr. DAVIS, though actively engaged as chairman of the committee of arrangements, refused to allow his name to go before the nominating committee for the reason that on previous occasions he had opposed the policy of limiting the choice to the place of meeting. Although the war was still in active progress, delegates were present from seventeen States, and the nominating committee recommended the election of Dr. ALDEN MARCH of Albany, N. Y., president for the ensuing year. The recommendation of the committee was adopted with unanimity, and Dr. MARCH was conducted to the chair. Dr. ALDEN MARCH was born in Sutton, Mass., in 1795, and died in Albany, N. Y., June 17, 1869. He was educated in Brown University, and graduated in medicine in 1820. Selecting Albany, N. Y., as his field for practice, he commenced there a course of lectures on anatomy and was soon after made professor of anatomy in the Castleton Medical College, but retained his residence in Albany. In 1839 the Albany Medical College was established, and he was made professor of surgery, a position which he filled with signal ability until his death.

The fifteenth annual meeting was held in New York City, June 7–9, 1864, the president, Dr. ALDEN MARCH, in the chair, and was attended by 535 members, representing eighteen States and the District of Columbia. The nominating committee reported, recommending the election of Dr. NATHAN S. DAVIS of Chicago president for the ensuing year. After some discussion and several motions, the report of the committee was adopted and Dr. DAVIS was duly conducted to the chair.

The sixteenth annual meeting of the ASSOCIATION was convened in Boston, Mass., June 6, 1865, and remained in session four days, the president, Dr. N. S. DAVIS, being in the chair. The practice which had prevailed since the commencement of the ASSOCIATION, of electing officers on the first day of each annual meeting, and immediately conducting them to their official positions without opportunity for any preparation, had led to so much embarrassment in the transaction of business on account of deficient knowledge of parliamentary rules on the part of the presiding officers, that near the close of the meeting in New York, in 1864, the constitution was so amended that the election of officers should be near the close of each



N. S. DAVIS IN 1854.

annual meeting, and "the president and vice-presidents should assume the functions of their respective offices at the beginning of the annual meeting next succeeding their election," thus giving them one year to prepare for an efficient discharge of their official duties. In consequence of this change, Dr. N. S. DAVIS continued to preside through the entire annual meeting of 1865, and received the highest tokens of approval at its close.

The seventeenth annual meeting was held in Baltimore, Md., commencing May 1, 1866, and continuing four days. It was called to order by the president, Dr. D. HUMPHREYS STORER of Boston, who had been elected near the close of the preceding annual meeting. Dr. DAVID HUMPHREYS STORER was born in Portland, Me., March, 26, 1804, and died in Boston, Sept. 10, 1891. He received a liberal education, graduating from Bowdoin, Me., in 1822, and from the

medical school of Harvard College in 1825. He commenced practice in Boston and soon gained a high reputation both as a physician and a student of the natural sciences. In 1854 he succeeded Dr. WALTER CHANNING as professor of obstetrics and medical jurisprudence in the Harvard Medical School and continued to fill the chair until 1868.

The eighteenth annual meeting was held in Cincinnati, Ohio, May 7–10, 1867, with Dr. HENRY F. ASKEW of Delaware as president, who had been elected near the close of the preceding meeting in Baltimore. He was born near Wilmington, Del., in 1805, and died in that city March 1, 1876. He graduated in medicine from the medical department of the University of Pennsylvania in 1826, and commenced practice in Wilmington in 1828. He gained a large practice, and was one of the most faithful and influential members of the ASSOCIATION, and a good presiding officer.

The nineteenth annual meeting was held in Washington, D. C., May 5–8, 1868. Dr. SAMUEL D. GROSS of Philadelphia, who had been elected near the close of the preceding meeting, in Cincinnati, called the meeting to order and presided during the subsequent general sessions of the ASSOCIATION. SAMUEL DAVID GROSS was born near Easton, Pa., July 8, 1805, and died in Philadelphia, May 6, 1884. He received a good academic education, and graduated in medicine from Jefferson Medical College in 1828. He commenced practice in Philadelphia, and soon displayed the talent for research and authorship that in after years placed him at the head of the surgical department in America, both as a writer and a teacher. He became professor of surgery in Jefferson Medical College in 1856, and continued to fill the chair until 1882. Before the close of this annual meeting it was decided to encourage a larger attendance from the Southern States by electing a president and holding the next meeting in that part of the country. Consequently, Dr. WILLIAM O. BALDWIN of Alabama was elected president for the next year.

The twentieth annual meeting was held in New Orleans, La., May 4–7, 1869, with Dr. WILLIAM O. BALDWIN, president, in the chair. Dr. WILLIAM OWEN BALDWIN was born in Montgomery Co., Ala., Aug. 9, 1818, and died in the city of Montgomery, Ala., May 30, 1886. He received a good collegiate education, and graduated in medicine from Transylvania University, Ky., in 1837. He commenced practice in Montgomery, where he spent his entire professional life in alleviating human suffering, prolonging life, and promoting every important interest in society. He was a good presiding officer and aided much in bringing the members of the profession in the South into cordial relations with the national ASSOCIATION after the Civil War.

The twenty-first annual meeting was held in Washington, D. C., May 3–6, 1870, the president, Dr. GEORGE MENDENHALL of Ohio, in the chair. Dr. MENDENHALL was born in Pennsylvania, May 5, 1814, and died in Cincinnati, Ohio, June 4, 1874. In early childhood he was taken with his parents to Columbiana Co., Ohio, and received his education in the schools of that county. After graduation, in 1835, he located in Cincinnati in 1843. He occupied the chair of obstetrics and diseases of women in the Miami Medical College from 1852 to 1873.

The twenty-second annual meeting was held in San Francisco, Cal., May 4–7, 1871, the president, Dr. ALFRED STILLÉ of Pennsylvania, in the chair. He was born in Philadelphia, Oct. 30, 1813, and was educated in the University of Pennsylvania, receiving the degree A.B. in 1832 and M.D. in 1836, and is still a resident of the same city, having enjoyed these many years a high reputation both as writer and teacher in the departments of materia medica and practice of medicine. He was an active participant in the conventions of 1846 and 1847, and one of the first secretaries of the ASSOCIATION. He retired from the chair of theory and practice of medicine in his alma mater in 1884, after twenty years of service.

The twenty-third annual meeting was held in Philadelphia, May 7–10, 1872, the president, Dr. DAVID W. YANDELL of Kentucky, in the chair. Dr. YANDELL was born in Murfreesboro, Tenn., April 4, 1826, and died in Louisville, Ky., May 3, 1898. He received a good collegiate and medical education, was professor of surgery in the medical department of the University of Louisville many years, was medical director of the confederate army during the Civil War, and was a man of much energy and influence.

The twenty-fourth annual meeting was held in St. Louis, Mo., May 6–9, 1873, the president, Dr. THOMAS M. LOGAN of California, in the chair. Dr. LOGAN was born in Charleston, S. C., July 31, 1808, and died in Sacramento, Cal., Feb. 13, 1876. He received a collegiate education, and graduated in medicine from the Medical College of South Carolina in 1828. After practicing several years in Charleston and in New Orleans, he removed to Sacramento, Cal., in 1850, where he remained until his death. He enjoyed a good reputation both as a practitioner and a writer on medical subjects.

The twenty-fifth annual meeting was held in Detroit, Mich., June 2–5, 1874, the president, Dr. JOSEPH M. TONER of Washington, D. C., in the chair. Dr. TONER was born in Pittsburg, Pa., April 30, 1825, and died at Cresson Springs, Pa., July 30, 1896. He received a fair collegiate education, and first graduated in medicine from Vermont Medical College in 1850, and subsequently, in 1853, took the degree of M D. from Jefferson Medical College. He located in Washington, D. C., in 1855, and soon acquired a good general practice and became identified with the medical societies, both local and national. He developed very high social and literary qualities, and was an active and persevering collector of the works of American authors. A few years before his death his large collection of such works was donated to, and became a part of, the congressional library in Washington. He died while spending a few weeks at Cresson Springs.

The twenty-sixth annual meeting of the ASSOCIATION was held in Louisville, Ky., May 4–7, 1875, President Dr. WILLIAM K. BOWLING of Nashville, Tenn., in the chair. Dr. BOWLING was born in 1808, and died at his residence on Cumberland Mountain, near Nashville, Tenn., Aug. 6, 1885. Dr. BOWLING was eminent

as a practitioner and teacher of medicine, and a leader in all that pertained to the educational, social and practical interests of the profession in the Mississippi Valley.

The twenty-seventh annual meeting of the ASSOCIATION was held in Philadelphia, June 6–9, 1876, President Dr. J. MARION SIMS of New York, in the chair. Dr. SIMS was born in Lancaster District, S. C., Jan. 25, 1813, and died in New York, Nov. 13, 1883. He received a college education at Columbia, S. C., and graduated in medicine from Jefferson Medical College, Philadelphia, in 1835. After practicing ten or twelve years in his native State, he removed to New York City, and soon acquired a very high reputation in the treatment of diseases and accidents pertaining to the viscera of the female pelvis, by surgical procedures.

The twenty-eighth annual meeting was held in Chicago, June 5–8, 1877, Dr. HENRY I. BOWDITCH of Boston in the presidential chair. He was born in Salem, Mass., Aug. 9, 1808, and died in Boston in 1892. He was educated in Harvard College, and graduated in medicine from the medical department of the same institution in 1832. He was through life a diligent student and investigator, making many valuable contributions to medical literature and fostering everything justly promotive of the public interests. His election to the presidency was a proper reward for long and faithful services in the interests of the ASSOCIATION.

The twenty-ninth annual meeting was held in Buffalo, N. Y., June 4–7, 1878, President Dr. TOBIAS GIBSON RICHARDSON of New Orleans, La., in the chair. Dr. RICHARDSON was born in Lexington, Ky., Jan. 3, 1897, and died in New Orleans May 26, 1892. In 1845, after becoming a resident of Louisville, Ky., he commenced the study of medicine as the private pupil of Dr. S. D. Gross, and graduated, three years later, from the medical department of the University of Louisville. He early acquired a good reputation, especially in anatomy and surgery, and in 1858 accepted an appointment to the chair of anatomy in the medical department of Tulane University, New Orleans, La., and removed to that city. His election to the presidency of the ASSOCIATION was owing partly to his high professional character, and in part to the active influence of Dr. S. D. GROSS, who urged it as calculated to more completely obliterate the effects of the previous Civil War.

The thirtieth annual meeting was held at Atlanta, Ga., May 6–9, 1879, the president, Dr. THEOPHILUS PARVIN of Indianapolis, Ind., in the chair. Dr. PARVIN was born in Buenos Ayres, Jan. 9, 1829, during the temporary residence of his parents in that country, and died in Philadelphia, Jan. 29, 1898. He received a fair college education, and in 1852 received the degree of M.D. from the medical department of the University of Pennsylvania. His literary tastes and teaching ability were of a high order, and after filling professorships in other places he accepted the chair of obstetrics and diseases of women in the Jefferson Medical College, Philadelphia, and removed to that city in 1883. He presided during the meeting in Atlanta with dignity and efficiency.

The thirty-first annual meeting was held in New York City, June 1–4, 1880, President Dr. LEWIS A. SAYRE of New York in the chair. Dr. SAYRE was born in Morris County, N. J., Feb. 29, 1820, graduated as A.B. from Transylvania University, Kentucky, in 1839, and entered the College of Physicians and Surgeons, New York, from which he received the degree of M.D. in 1842. He rapidly acquired a reputation in the orthopedic department of surgery, and on the organization of the Bellevue Hospital Medical College he was made professor of orthopedic surgery, including fractures and dislocations, and has retained the same until the present time. His election to the presidency was amply merited, not only by long and faithful work in the ASSOCIATION, but also by high reputation as a teacher and author.

The thirty-second annual meeting was held in Richmond, Va., in May, 1881, the president, Dr. JOHN T. HODGEN of St. Louis, Mo., in the chair. Dr. HODGEN was born in Hodgenville, Ky., Jan. 17, 1826, and died in St. Louis, Mo., April 28, 1882. He received a liberal education, including two years in Bethany College, Va., and was graduated in medicine from the medical department of the University of Missouri in 1848. He made St. Louis his permanent residence in 1854, and became a member of the faculty of the St. Louis Medical College, teaching, at different times, anatomy, physiology and surgery, and had been dean of the faculty seventeen years at the time of his death.

The thirty-third annual meeting was held in St. Paul, Minn., 1882, First Vice-president Dr. P. O. HOOPER of Arkansas in the chair. At the preceding meeting in Richmond, Va., Dr. JOSEPH J. WOODWARD of the medical corps of the U. S. A. was elected president for the ensuing year, but before the time for the next meeting his health had become too precarious to permit of his attendance. Dr. WOODWARD was born in Philadelphia in 1832 and died in the same city, Aug. 17, 1884. He received his education in the schools of Philadelphia, from which he received the degrees of A.B and A.M., and graduated in medicine from the medical department of the University of Pennsylvania in 1853. He soon after entered the medical corps of the army and rose rapidly until he became chief assistant in the surgeon-general's bureau at Washington, D. C. He was a pioneer in microscopic photography and one of the chief founders of the Army Medical Museum.

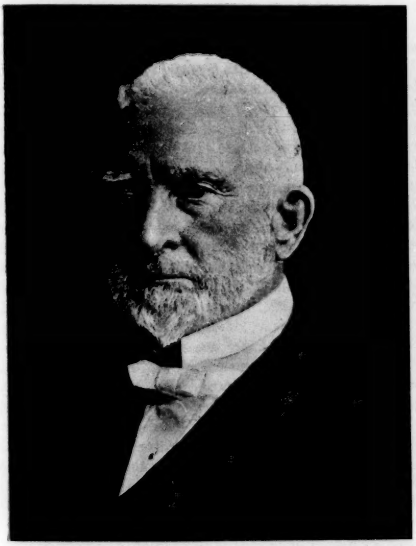
The thirty-fourth annual meeting was held in Cleveland, Ohio, June, 1883, the president, Dr. JOHN LIGHT ATLEE of Pennsylvania, in the chair. Dr. ATLEE was born in Lancaster, Pa., Nov., 2, 1799, and died in the same city, Oct. 1, 1885. He received a good academic education and later the degree of M.D. from the University of Pennsylvania in 1820. He became a member of the AMERICAN MEDICAL ASSOCIATION at its origin in 1847, and remained faithful to every interest until his death—a general practitioner worthy of imitation.

The thirty-fifth annual meeting was held in Washington, D. C., May 6–9, 1884, the president, Dr. AUSTIN FLINT of New York, in the chair. Dr. FLINT

was born in Petersham, Mass., Oct. 20, 1812, and died in New York, March 14, 1886. He received a college education at Amherst and Cambridge, and graduated at Harvard Medical School in 1833. His excellent reputation as teacher, author and defender of all that is sound in ethics is well known on both sides of the Atlantic.

The thirty-sixth annual meeting was held in New Orleans, May, 1885, President Dr. HENRY F. CAMPBELL of Georgia in the chair. He was born in Savannah, Ga., Feb. 10, 1824, and died in Augusta, Ga., Dec. 15, 1891. He received a classic education and graduated in medicine from the medical department of the University of Georgia in 1842. He attained a high reputation both as a practitioner and medical writer, and was a good presiding officer.

The thirty-seventh annual meeting was held in St. Louis, Mo., in May, 1886, President Dr. WILLIAM BRODIE of Detroit, Mich., in the chair. Dr. BRODIE had long been an active member of the ASSOCIATION, and a prominent member of the profession in Detroit. He died in that city, July 30, 1890.

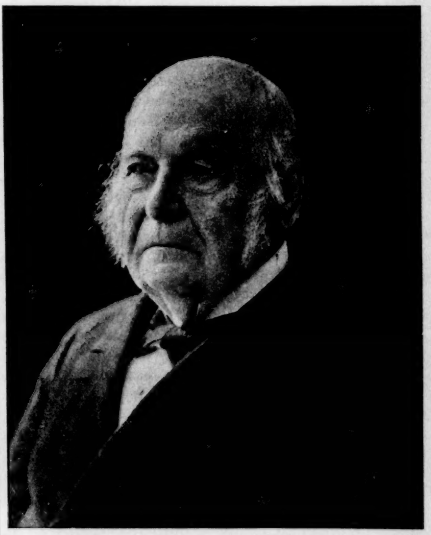


ELISHA H. GREGORY.

The ASSOCIATION held its thirty-eighth meeting in Chicago, in June, 1887, with Dr. ELISHA H. GREGORY, who was born near Russellville, Ky., Sept. 10, 1824, as president. He studied medicine under Dr. F. W. G. THOMAS of Booneville, Mo., and received his medical degree from the medical department of the St. Louis University in 1849. He has long been known as a prominent surgeon and medical teacher in St. Louis, where he has for half a century been a resident, occupying the position of surgeon-in-chief to St. Louis Mullanphy Hospital for forty-seven years, and teacher of anatomy and surgery in St. Louis Medical College.

The thirty-ninth meeting was held in Cincinnati, Ohio, May, 1888, with Dr. A. Y. P. GARNETT of Washington, D. C., in the chair. Dr. GARNETT was one of the most prominent figures in the medical profession in the Nation's capital. He was born Sept. 19, 1820, in Essex County, Va., and died at Atlantic City, N. J., July 11, 1888. He graduated from the medical department of the University of Pennsylvania in 1841, and was for five years surgeon in the navy, then he resigned and entered practice in Washington. At the commencement of the Civil War he entered the confederate service and was special physician to many of the prominent leaders of the confederate government. After the war he resumed his practice in Washington, where he held his former high position, and was for many years professor of the practice of medicine in the National Medical College.

The fortieth meeting was held in Newport, R. I., in July, 1889, the presiding officer being Dr. W. W. DAWSON of Cincinnati, Ohio. Dr. DAWSON was born



E. M. MOORE.

in Berkley County, Va., Dec. 19, 1828, and died in Cincinnati, Feb. 16, 1893. He received, in his youth, a classic education, and in 1850 graduated from the medical college of Ohio. He was a member of its faculty and clinic teacher from 1860 until his death, with the exception of about six years.

The ASSOCIATION held its forty-first meeting in Nashville, Tenn., in May, 1890, with Dr. EDWARD MOTT MOORE of Rochester, N. Y., as president. Dr. MOORE is still a prominent physician in New York State. He was born in Rahway, N. J., July 15, 1814,

and graduated from the University of Pennsylvania in 1838. He has held various prominent positions and has published many valuable medical papers.

The ASSOCIATION met in its forty-second meeting in Washington, D.C. in May, 1891, with Dr. WILLIAM T. BRIGGS as president. Dr. BRIGGS was born Dec. 4, 1829, at Bowling Green, Ky., and died at Nashville, June 13, 1894. He received a collegiate education and graduated from the medical department of the University of Pennsylvania in 1850. Besides the presidency and vice-presidency of the AMERICAN MEDICAL ASSOCIATION, he has held other similar honors. He was one of the founders and presidents of the American Surgical Association and presided over the section of general surgery at the International Medical Congress in 1887. He held until his death the chair of surgery in the consolidated medical departments of the Vanderbilt University and the University of Nashville, from 1868.

The forty-third meeting of the ASSOCIATION took place in Detroit, Mich., in June, 1892, with Dr. HENRY O. MARCY in the chair. Dr. MARCY, who has more than a national reputation as a surgeon, was born June 23, 1837, in Otis, Mass. He received his education at Wilbraham Academy and Amherst College and took his medical degree at Harvard in 1863. He served as surgeon and medical director during the Civil War and subsequently studied abroad. His contributions to medical literature are numerous and valuable, and he is a member of various medical and scientific societies, both native and foreign. He is still in active practice in Boston, Mass.

Dr. HUNTER H. MCGUIRE presided at the forty-fourth meeting, which was held at Milwaukee, Wis., in June, 1893. He was born at Winchester, Va., Oct. 11, 1835, and received his medical degree at the Winchester Medical College in 1855, and again at the medical college of Virginia in 1860. He served as medical director in the Confederate army under JACKSON and EWELL during the Civil War and has practiced in Richmond since then. He has filled many high positions and received many honors from different sources. He is still in active practice and is one of the leading surgeons in the country.

The forty-fifth meeting, held in San Francisco, May, 1894, was presided over by Dr. JAMES F. HIBBERD of Richmond, Ind., who was born in Monrovia, Md., Nov. 4, 1816, and graduated from the College of Physicians and Surgeons of New York in 1849. He was one of the original "forty-niners" of California, where he practiced medicine until 1855. In 1856 he settled at his present home. He has held high positions, has traveled extensively, and stands high among his profession in his State.

The forty-sixth meeting occurred in May, 1895, at Baltimore, Md., with Dr. DONALD MACLEAN of Detroit as president. Dr. MACLEAN was born Dec. 4, 1839, in Seymour Township, Ontario, received his education at Queens University, Kingston, and his degree of M.D. in 1862 from Edinburgh University. Returning to Canada, he practiced medicine until 1870, excepting two years service as acting assistant-surgeon U.S.A. in 1863–64. He was also professor of clinic surgery and institutes of medicine in Queen's University from 1864 till 1869, when he accepted the chair of surgery in the University of Michigan, a position he resigned in 1887. He has practiced medicine in Detroit since 1893 and is the author of many valuable contributions, chiefly surgical, to medical literature.

The forty-seventh meeting of the ASSOCIATION took place in Atlanta, Ga., May, 1896, the president, Dr. R. BEVERLY COLE of California. Dr. COLE was born in Manchester, Va., Aug. 12, 1829, and graduated from the Jefferson Medical College in 1849, studying later in France, Germany and England. After practicing in Philadelphia for a year or two, he went to San Francisco, which is still his home and where he stands high among his medical confrères.

The forty-eighth meeting occurred at Philadelphia in 1897, Dr. NICHOLAS SENN of Chicago presiding. Dr. SENN is a native of Switzerland, but emigrated to this country in his early childhood and received his education in Wisconsin. He graduated from the Chicago Medical College in 1868, and after practicing some time in Wisconsin he went to Germany and took the degree of doctor at the University of Munich in 1878. Since 1891 he has made his home in Chicago, where he is connected with Rush Medical College. Dr. SENN'S reputation as a surgeon is world-wide, and his contributions to medical and surgical science are known the world over.

The meeting in 1898, the forty-ninth in the series, was held in Denver, Colo., in June of that year, Dr. GEORGE M. STERNBERG of Washington, D. C., president. The sessions were presided over by Dr. T. J. HAPPEL of Tennessee, the president being detained on account of official duties connected with the Hispano-American war. Dr. STERNBERG'S position as surgeon-general of the United States Army has made his name familiar to every one, but it has long been well known to the profession through his work in bacteriology, etc. He was born in Otsego County, N. Y., in 1839, and graduated from the College of Physicians and Surgeons of New York in 1860.

Examination of the list of those who had been duly elected president of the ASSOCIATION—the highest official honor the profession can bestow, will show that all but six or seven had enjoyed the advantages of a classic as well as medical education, and of the thirty-seven who have died, only four failed to reach the vicinity of the "three score years and ten"; while of the thirteen still living, five are beyond the four score years. Perhaps this is as good a showing, both for life and work, as would be made by an equal number of leading members of the other professions.

NATHAN SMITH DAVIS.

PROGRESS IN SURGERY.

We have reached the *fin de siècle*, and the Columbus meeting will be the fiftieth celebrated by the AMERICAN MEDICAL ASSOCIATION. In these days of "end of century" literature, peace jubilees and patriotic celebrations in which the crowning achievements of the Nation are so conspicuously presented

to our attention, it is not surprising that the rise, progress and future of the American people and their institutions should be the one thought and theme that dominates the mind on every public occasion. "The achievements in every walk of life, the innumerable inventions, the wonderful discoveries, the magnificent results, have all been considered, and the sum total is unparalleled in the history of Nations."

Nearly a quarter of a century ago, on the occasion of the centennial celebration held in Philadelphia in 1876, the Nestor of American Surgery, Dr. SAMUEL D. GROSS—whose name every student of American surgical history must reverently and unavoidably invoke, said: "A century has elapsed since the American Colonies, through their representatives, achieved their independence as a free and sovereign people. What the country has done since that eventful epoch in the various pursuits and occupations of life is a legitimate object of inquiry, especially at a moment when a Nation now composed of forty millions of human beings is about to celebrate its centennial anniversary in a form intended to display, in the amplest manner, its mental and physical wealth. It is well that every profession should open its ledgers and examine its accounts and see how it stands with itself and with the world at large." How successfully and thoroughly this investigation was conducted in behalf of surgery, and what a splendid balance-sheet to the credit of American surgeons was drawn up by that expert accountant, will be appreciated by those who have read the suberb collection of essays in that now monumental work, "A Century of American Medicine" (1876–86), which Dr. GROSS published, with the collaboration of his eminently qualified colleagues—E. H. CLARK, HENRY G. BIGELOW, GAILLARD THOMAS, and J. S. BILLINGS. This is the first systematic and thorough effort made to chronicle, analyze and compile the earlier contributions, of distinct American origin, to the medical sciences. In this work will be found the picture of American surgery drawn on a broad canvas by the hand of a master; in it will be found delineated the first and ill-defined traits of the young Titan as he was rocked in his rude and primitive cradle by rough but sturdy and honest hands; and then again, he is shown to us growing to maturity, tall and towering beyond his years, a giant in stature and yet graceful and beautiful in all his proportions. No American can read the admirable chapter devoted to the history of American surgery as written by GROSS without feeling grateful to the author for his indefatigable industry in bringing to light a perfect mine of historic gems which arouse in the reader a just feeling of pride and admiration, more especially when their beauty is linked with the thought that they have crystallized in our native soil. Neither is it possible to read the text without recognizing in the loving hand of the author that he was himself the embodiment and the prototype of all that is distinctive, great and admirable in our American institutions. Sixteen years after the publication of this work the Columbian celebration, in Chicago, which commemorated the four hundredth anniversary of the discovery of America by COLUMBUS, suggested many retrospects and reviews of progress, among which, of the greatest interest to surgeons, was a brilliant and eloquent oration delivered before the New York Academy of Medicine (December, 1892) by Dr. FREDERIC S. DENNIS. This is a masterly document, bristling with facts and irrefutable conclusions, a worthy supplement to the work of GROSS, previously referred to. This address summarizes in all its essential features, the most distinct achievements of American surgery up to 1892. Since that time two notable occasions have taken place which are of especial interest to medical men and especially surgeons, of this country: 1. Golden jubilee of the American discovery of anesthesia, which was most appropriately celebrated by the clinic staff of the Massachusetts General Hospital, Dec. 1, 1896, and simultaneously solemnized in many clinics all over the world as far as Moscow in the East and Japan in the West. The general recognition given by English and Continental surgeons, of the significance of the event, could not be other than gratifying to the profession in America. 2. The other occasion was the celebration of the semicentennial of the AMERICAN MEDICAL ASSOCIATION, in June, 1897. This magnificent reunion, so fraught with significance and reminiscences to the elders of the profession, did not fail to stimulate the eloquence and the powers of some of the most gifted members, among whom none was more authorized to speak, or more brilliant as an exponent, than Prof. W. W. KEEN, who delivered the address on surgery. In this address, special reference was made in a most appreciative manner to the contributions of American origin, which were brought down practically to the present period.

From this brief allusion to some of the most notable contributions to the history of American surgical achievement, as presented by the representative writers referred to, it is evident that the duty of recording and epitomizing the labors of our fellow workers in surgery has not been neglected, and that little, in fact, is left to be done by others—especially at this moment when our literature has become a common possession to all students the world over, through the medium of innumerable year-books and annuals. In fact, nothing is left to be done by any one who would presume to instruct or edify his contemporaries with any new claims for historic recognition. Nevertheless, in obedience to the "spirit of the times," and encouraged by the stupendous evidences of our strength and prosperity, as a Nation, we feel prompted to recall some of the most conspicuous events in the history of surgical achievements in this country—with the hope that in the facts that we have compiled and brought together, the young and rising generation of surgeons will proudly realize the inheritance given to them by the men who lived in the luminous century that is about to expire.

The science of surgery in this country made no impression on the world until the beginning of the present century. When the nineteenth century dawned on us, in the long list of brilliant men who made the surgery of the world famous, the name of no American appeared on the honor scroll, but from

Colonial days down to the present times the names of Americans shine forth in bold relief.

The progress of American surgery, as pointed out by DENNIS, is due, as in all other arts and sciences, in great part to the dissemination of her medical literature, to the foundation of medical libraries, to the organization of hospitals and laboratories, to the establishment of medical schools, and last, but not least, to the vast increase of the population and wealth of the country, to the native inventiveness, ingenuity and adaptability, which is universally recognized as a dominant trait of the American people. The great dissemination of American literature is made apparent by reference to BILLINGS' statistics, which show that in the United States at the beginning of the Revolutionary War there was only one medical book, three reprints and about twenty pamphlets by American authors; while to-day there are about 7000 books and reprints and innumerable pamphlets. There are over 300 books and pamphlets written and published annually by American writers, to say nothing of over 5000 journal articles published each year by our countrymen.

In surgery there were only three books by American authors prior to 1842, while to-day the surgical writings by American authors fill the shelves of every library on the face of the earth. It has been demonstrated that in surgery alone, in 1879 and 1880, there were written 45 books and over 1717 journal articles. This is almost twice as many surgical books as were written in England during the same period, and many more journal articles. It can be made even more forcible by stating that in 1879–80 there were written 10,334 books and journal articles in the United States, while during the same time, in England, the other English-speaking nation, there were written only 7476. In addition to this, many of our text-books have been translated into other languages and have been adopted into foreign medical schools. In fact, the reproduction of American text-books and other works, dictionaries, etc., has become a paying specialty of more than one English publisher. The wide and rapid dissemination of medical literature has no doubt been one of the most important factors in the advancement of surgical knowledge in the United States. In 1809, when EPHRAIM MCDOWELL, the father of ovariotomy, performed his first operation in the backwoods of Kentucky, the entire world remained in ignorance of his discovery. It was only after eight years that his first three cases were published in the *Philadelphia Medical Repertory and Analytic Review*, and not until 1824, when LIZARS first reproduced MCDOWELL'S cases in the *Edinburgh Medical and Surgical Review*, that his work attracted any notice whatever. There were then no societies for the diffusion of knowledge. News at that period of our history, locked up as it always was in the mail-bags of the cumbersome four-wheeled stage coach, was often stale before it reached its destination. In those days, as well as for a long time afterward, there were no railroads, no steamships, no telegraph. The world moved at a snail's pace, or as if on the back of a tortoise, at the rate of about six or eight miles an hour. Had MCDOWELL'S operation been performed in our days the news would have spread far and wide within the first twenty-four hours and in an almost incredibly short time would have been carried to the utmost limit of civilization. As it was it was locked up first eight years in the brain of its originator, and then in an obscure medical journal, and when it at last reached the other side of the Atlantic it met with only ridicule and incredulity. Compare this with the cable reports of the proceedings of the international medical congresses and other large national gatherings in Europe which are flashed across the Atlantic to our enterprising weeklies almost as fast as the words leave the lips of the speakers; compare the condition of the first half of this century with the present immediate acquisitions of knowledge as obtained in this country; think how instantaneously every important and interesting announcement from Europe reaches us, as the discovery of the Roentgen rays, SCHLATTER'S case of total resection of the stomach, etc.

The most important factor in the improvement and progress of surgery, as in other departments in medicine, has been the immense advance in medical teaching. As KEEN tells us, fifty years ago the course of lectures began on the second day of October and ended soon after the middle of February, and if we take out the holidays and remember that not a few made up for coming late by leaving early, it was quite a possibility for a man to receive his authorization to practice—a diploma—which alleged him to be *Virum Probum et Ornatum, in arte Medica, atque ac chirurgica, . . dignum amplissimus honoribus academicis, . .* after practically only two sessions of three months each! Compare this with the four-years graded course of the present, counting four sessions of not less than six and often eight months each; the recitations, laboratory courses and special demonstrations; and then the preliminary requirements, which are justly becoming every year more exacting and severe. Finally, if we consider the number of post-graduate schools that have been established, with their score of ambitious specialists struggling in every city with that indomitable energy and ambition—in the terrible struggle for survival and supremacy which is exhibited in all phases of metropolitan life—we will realize to what extent the student of the present is ahead in educational advantages over his prototype of forty years ago. The English system of apprenticeship which prevailed in this country until recently in a modified form as a preceptorship has to a large extent passed away. It never possessed the severe and exacting conditions of the English system. The demands of preliminary education are now so rapidly encroaching on the opportunities of the student that between the exacting demands of the academic curriculum on the one hand, and the professional course on the other, there is no time left for private instruction and apprenticeship. In preliminary requirements, however, we are still behind England and Continental Europe, but the demand for highly educated men in our profession is growing more and more apparent with each year, and in the immediate future

we will see our students as fully armed with the shield of Minerva as the most exacting idealists might wish us to be. In this respect the medical college association has done splendid work, though in its desire to promote its object it has at times forgotten the unequal, economic and therefore educational conditions, which still differentiate the population of this vast country.

Allied to medical teaching, and the most important adjunct to medical literature, is the establishment of medical libraries. In this all Americans will agree with Dr. KEEN, when he says: "In this, as an American, I am proud of my own country. No foreign nation can point with equal pride to any such medical libraries as the last thirty years have developed in this country. Foremost, not only among American libraries, but in the world, is that of the surgeon-general's office of the U. S. Army. Not only has it gathered thousands of medical books and 1100 medical journals (the estimate of Dr. FLETCHER) from all over the world, but the entire library is managed with a liberality which makes it the admiration of every foreigner. Its treasures are freely at the service of the country, and the publication of its magnificent 'Index Catalogue,' under the editorship of Dr. BILLINGS, has made the whole world a debtor to the United States." It is with a positive pang of pain that we learn that the *Index Medicus*, the only complete monthly record and guide to the current literature of medicine published anywhere, and which has for so many years rendered priceless service in facilitating research, is about to be permanently suspended for want of adequate patronage (see JOURNAL, May 27, p. 1184). We look upon this as a veritable calamity to our profession, which we hope will be properly recognized by the ASSOCIATION at the coming meeting. The disappearance of this publication for the reasons given, would be a blot that would forever stain our reputation as a progressive and intellectual body of men.

The tripod upon which rests the lamp of surgical progress is carried by hemostasis, anesthesia and antisepsis. The progress of surgery can be measured in chronologic order by the consecutive discovery of the means by which these fundamental desiderati could be secured. The first discovery is indelibly associated with the magnificent picture of PARÉ in the fifteenth century, when at the siege of Metz he is recognized in the midst of a wondering crowd of spectators, holding a ligature in his hands as he is about to occlude a bleeding vessel. He spurns the hot iron and "burning oyle" that, in accordance with the practice and traditions of the times, are offered to him by his assistants. The curtain drops and is not raised again until nearly five centuries after, when the scene is transferred to a spot in the wilderness of the new continent, in a little village in Georgia, where an American, CRAWFORD W. LONG, is seen, timidly and hesitatingly, but nevertheless independently of all foreign suggestions, attempting to remove a growth from a patient whom he has put to sleep, for the first time, with ether. This is in 1842, and the chief actor is forgotten. Again the scene opens in America, the lights are brighter and we are in the Massachusetts General Hospital; the date is Oct. 16, 1846. On one side we see MARTIN confidently administering the new letheon and saying finally to the distinguished operator, Dr. WARREN, "The patient is ready." The operation is performed without a sign of pain, and Dr. WARREN, himself amazed, turns to the astonished audience, saying: "Gentlemen this is no humbug;" from that moment the American invention for the suppression of pain, christened years after, "anesthesia," by another great American—OLIVER WENDELL HOLMES—ceased to be a dream and became a living reality. As Professor ASHURST has well said: "Surgeons went on in every country cutting and burning, and the patients went on writhing and screaming, until the 16th day of October, 1846, when surgical anesthesia became the priceless heritage of the civilized world."

When we reflect how few of the aids to surgical diagnosis were possessed by the surgeons of 1846, the amount of work which they accomplished presents all the stronger contrasts. They had no modern aspirating-needle, no clinic thermometer, no laryngoscope, no ophthalmoscope, no endoscope, no cystoscope, and the quantitative and even qualitative analysis of the urine was far from being an ordinary or simple routine performance. The microscope was just coming into use and then for pathologic purposes only. As WARREN says, however, they possessed an excellent technic as far as operative surgery was concerned—a natural outgrowth of the celerity required in preanesthetic operations. Their capacity for operating was unlimited, but their judgment was not guided by the many aids which serve us to-day. There was an activity in the operating-theaters in times of peace that had never before been known. But with the great increase in hospital activity came a corresponding increase in hospital pests; and it seems highly probable that during the twenty years that followed the introduction of anesthesia the opportunity to study septic diseases was greater than ever it had been.

The advent of LISTER, and the universal adoption of antiseptic and aseptic practice, marked a new epoch in the history of American surgery. For ten years after the advent of the new evangel there was skepticism and doubt, but the truth prevailed, and now no country can boast of more perfect, more complete, or more modern operating-theaters than those which the influence, enterprise and ability of our surgeons has caused to be erected in every hospital and metropolis of this country. What is most remarkable is that the majority of the new operating-theaters which have sprung up everywhere, as if by enchantment, in the last twenty years, and which have cost vast sums of money, have grown out of private donations or the endowments of corporations independently of State aid. Nothing illustrates better the peculiarities of our institutions. Nothing impresses foreigners more forcibly than the wonderful adaptation of individual initiative in meeting public needs.

But, in addition to the amphitheaters and hospitals which constitute one of the glories of the present period of American surgery, the surgeons of this country have added no small *quantum* to the perfec-

tion of the aseptic technic, and the results are here to show that the activity, enterprise and originality of our surgeons has not been barren of results. At one time the apparatus and appliances for sterilization were largely imported from Germany and other countries, but this condition of things was promptly transformed by the production of home-made models that exceeded in simplicity and perfection those of alien manufacture.

We also notice that original contributions to the technic of asepsis which have endured a long clinic test, have been added to every laboratory throughout the country, and that the first attempts to use absorbable animal material for ligatures originated in this country. PHYSICK, early in the present century experimented with buckskin. DORSETT preferred French kid divested of its color and polished surface. Such was his confidence in the safety of this material when properly prepared, that he employed it in various amputations and in a number of capital operations, always cutting off the ends close to the knot and treating the wound as if no ligatures had been used; and this was done at a time when it was almost a surgical crime to apply a ligature without leaving a long end hanging out of the wound by which to pull it through. HAWTHORNE of Philadelphia preferred parchment; JAMESON, buckskin; JOHN BILLINGER of Charleston and PAUL EVE of Nashville tried the sinews of deer extensively. All this has been forgotten, as such material was destined to failure in consequence of the ignorance of the period in the conditions that were essential for its successful application. To MARCY of Boston we now owe a resurrection of the animal ligature in a new and really valuable form—sterile kangaroo tendon. The surgeons of this country have also been prolific in the invention of methods of sterilizing catgut for aseptic operations, of which the cumol process introduced by HOWARD KELLY, and the palladium method of W. W. KEEN are, among a score of others, the most original and distinctive.

Local anesthesia has found enthusiastic apostles in this country since the discovery of the value of cocain by KOLLER in 1884, and its introduction in the ophthalmic practice of this country by NOYES, the year after. In this respect the work done on this side of the Atlantic has not been purely imitative, but original, as witness the admirable researches of LEONARD CORNING, which for more than a decade (1885) have remained idle, notwithstanding the fact that they laid the foundation for a method of neural and central anesthesia which antedates the so-called methods of OBERST or of BIER, and is of as great a range of usefulness as the more generally known infiltrating method of SCHLEICH. When CORNING'S principle is applied with SCHLEICH'S infiltration anesthesia, in the infinitesimal doses suggested by the last observer, a mixed method of local anesthesia is obtained which is of the greatest practical value in diminishing the necessity for general anesthesia even in the major surgery of the extremities. CORNING'S great work has not yet been fully appreciated, and it is only now that the studies of German clinicians are bringing to light all the possibilities of cocain and eucain, and we are beginning to recognize the merit and originality of CORNING'S early experiments in the anesthesia of the spinal cord and nerve trunks.

The surgery of the extremities assiduously engaged the attention of the surgeons in all countries until the new and unexplored field of splanchnic surgery diverted their attention in that direction after the introduction of asepsis. The treatment of fractures and dislocations especially appealed to the mechanic and inventive instinct of the Yankee surgeon. A mere glance at the cyclopedic work of HAMILTON, and the later work of STIMPSON, both of which are recognized classics the world over, will suffice to convince any one of the sleepless activity of our ancestors in this direction. The names of PHYSICK; of DANIELS of Georgia, who in 1819 introduced the weight and pulley for extension in fractures of the thigh; of BUCK, HAMILTON and HUNT; of NATHAN R. SMITHLAND, HODGEN, are all indelibly inscribed in the history of fracture of the thigh. Since the use of plaster has become so general we find the names of FHLURER, LITTLE, SAYRE, with a host of others, conspicuous in perfecting its use and technic.

In fractures of the upper extremity the names of MOORE, FOX, STEPHEN SMITH, H. H. SMITH, BARTLETT, LEVIS, DUGAS, HAMILTON and TAYLOR are familiar as original American contributors to the treatment of fractured clavicle. The names of ALLIS, J. B. ROBERTS, PILCHER, are reminders of the more recent works done in this country in the surgery of these fractures. It is well known that the first surgeon who wired a fractured patella was RHEA BARTON (1834). The disasters that promptly followed the early operations speedily consigned BARTON'S procedure to oblivion. It was only when practiced successfully by LISTER himself that the operation entered into legitimate existence. POWERS of Denver, in 1889, collected 711 recent American cases, a large proportion of which were treated by operation.

In the treatment of ununited fractures the name of PHYSICK (1802), J. KEARNEY RODGERS (1827), KINLOCH of South Carolina, DETMOLD (1850), BRAINARD (1852), PANCOAST (1857), and SENN in the modern period, are conspicuous. In the management of compound fractures, American surgery has achieved remarkable results. The largest collection tabulated in the personal experience of one surgeon is the list published by DENNIS, of 1000 cases of compound fracture with a mortality from septicemia of only 1/7 of 1 per cent. Before the days of antiseptic surgery, the death-rate in the same class of injuries had been as high as 68 per cent.

The surgery of the joints can not be passed by in silence in the presence of so stalwart a pioneer as LEWIS A. SAYRE, whose early work in the correction of deformities justly obtained for him the title of "Father of orthopedic surgery" in this country. No one can fail to remember his invention of the plaster-of-Paris jacket for the treatment of Pott's disease of the spine, in 1874, or to recognize that this was one of the most beneficent discoveries that this country has given to the world. In addition to the numerous

principles of treatment, methods and operations that we owe to SAYRE'S originality, the great work inaugurated by him has been perfected until it has assumed the rank and title of a specialty which has added no uncertain luster to the reputation of American surgery. In this connection the names of TAYLOR, SCHAEFFER, RIDLON, PHELPS, ROBERTS, GIBNEY, WHITMAN, WILLARD JUDSON, VANCE, REGINALD SAYRE, BRADFORD and LOVETT, YOUNG, are among those who are most prominently identified with the introduction of ingenious devices for the correction of deformities.

In connection with dislocations the name of BIGELOW must be mentioned with reverence. His study of the mechanics of the hip-joint, and his methods of reducing its dislocations, have made his methods classic throughout the world. In recent years the name of ALLIS has likewise been inseparably linked with the treatment of the same class of injury. MCBURNEY'S ingenious hook, as applied by him for the reduction of obstinate dislocation of the shoulder, is a most original and practical addition to our resources.

The surgery of the extremities can not be dismissed without a passing reference to the success obtained by American operators by original methods in amputations and in the ligation of arteries, with mention of WYETH'S superb report of 69 disarticulations of the hip-joint for all causes, by different operators, by means of his skewer method of controlling hemorrhage, of which 11 died—a death-rate of only 1.59 per cent.; and ESTES' 77 personal amputations of the thigh with a loss of only 8 cases, 10.4 per cent. Such results need no commentary.

The operative treatment of the lesions of the vascular system, more particularly the arteries, is another one of these chapters which Americans can afford to read with pride, as the recital of these operations is simply a long record of unrivaled triumph. Probably the most conspicuous figure in the history of arterial surgery, at least that of the pre-antiseptic period, is VALENTINE MOTT, who alone ligated 138 of the large arteries for the relief of aneurysm. He ligated the innominate artery for the first time in the history of surgery, on May 11, 1818, but it was not until May 9, 1864, that the operation was first performed with success by another remarkable American, Dr. ANDREW W. SMYTHE of New Orleans. It is due to the lasting credit of this operator that the vertebral artery was also ligated systematically and for the first time in America. The left subclavian, in its first portion, was first ligated by J. KEARNEY RODGERS in 1845, but unsuccessfully, the first success being in 1892 when HALSTED of Baltimore not only ligated the artery, but successfully extirpated the sac after resection of the clavicle—a unique and brilliant feat. The left subclavian's first portion was again successfully ligated for the second time by SCHUMPERT of Shreveport in 1897. It would be impossible to refer in detail to the individual operations, but if we inquire further into the history of the subject we will find that if the records of American operators in the ligation of the large arterial trunks are excluded, there seems little left to the credit of other countries.

In the surgery of the brain and spinal cord we find that the work of American surgeons has been largely guided by the work of English and Continental surgeons. The improvement made by American surgeons, in the technic of cranial resection, is also original and notable. The instruments devised by ROBERTS, KEEN, HOPKINS and DEVILBISS have become a part of the surgical armamentarium the world over, and BONWILL'S surgical engine and the electric motor have been made serviceable in craniectomy by the addition of CRYER'S ingenious spiral and circular saws. The bone-cutter of CROSBY WRIGHT; the guarded saw and trephine of VAN ARSDALE; the circular saw of SENECA D. POWELL, which are used with hand or electric motor are admirable devices. So are PYLE'S cutting tools and HARTLEY'S chisels. Apropos of HARTLEY, we can not fail to notice that he independently devised and perfected a method of resection of the Gasserian ganglion for trigeminal neuralgia, which bears his name, and has been performed nearly 100 times by the operators of this and of other countries. The simultaneous suggestion of the same operation by KRAUSSE has linked the two names and caused it to be known as the Hartley-Krausse operation.

Of the surgery of the chest a great deal could be said, but MURPHY'S learned address is too recent and fresh to permit of much reference to this subject, and constitutes a most notable and original contribution to thoracic surgery. The author's experiment and explanations of interference with the piston action of the diaphragm through deflection of the mediastinum is, to say the least, ingenious and valuable. But of all the additions that have been recently made to the technic of thoracic surgery, probably the most interesting is the American invention known as the Fell-O'Dwyer apparatus, an inflator of the lungs which is a most powerful agent in overcoming the effects of traumatic pneumothorax. O'DWYER'S resurrection of BUCHUT'S crude ideas on intubation, and his magic transformation of the bloody and tragic picture of tracheotomy in diphtheritic croup, into a simple and bloodless bit of technic jugglery, by his original and perfected method of intubation, has practically closed, for all time, one of the most conspicuous chapters in the history of surgery. By again transforming the tracheotomy canula of the Fell apparatus into a conic intubation tube, he unconsciously but fittingly opened to surgery a new chapter of greater interest and promise than that which its previous achievements had brought to a close.

The International Medical Congress held at Washington, D. C., in 1887, marked one of the most memorable epochs in the evolution of abdominal surgery. As we look back and realize the short time that has elapsed, it appears to us almost incredible that from the impetus given to the surgical technic of the intestinal tract by the publication of SENN'S "Experimental Contribution to Intestinal Surgery with Special Reference to the Treatment of Intestinal Obstruction," such prodigious activity and revolutionizing transformation in abdominal surgery should have taken place. Nevertheless, it is undeniable that it is due almost exclusively to the stimulus furnished by Dr. SENN and to his innumerable experimental demonstrations on

the lower animals, that resurrected and gave new life to the forgotten principles of intestinal anastomosis and enteromorrhaphia first suggested by MAISONNEUVE. Dr. SENN'S previous work on the surgery of the pancreas—which is still the foundation of all of our knowledge of the surgical pathology of this organ—his researches in the repair of arteries, and on the ligature, his remarkable study of air embolism had already placed him in the foremost ranks of the surgical investigators of the day. The climax was reached when at the congress he presented one series of experiments after another demonstrating the feasibility and indications of anastomosis with the help of the decalcified bone plate, suggested by Dr. CONNEL of Milwaukee, and introduced new and fundamental principles in circular and other methods of intestinal enterorrhaphy. No single contribution has been presented to the profession in the last fifteen years which has been productive of more prolific and beneficent innovations. No single article has roused more profitable enthusiasm in the surgical spirit of any country than the epoch-making research that SENN gave to the world in 1887. Needless to add, the time has wrought great changes in the views and opinions then held. But whatever may be the ultimate destiny of the particular methods advocated at the time, and no matter how indifferently the profession may in future regard the practical application of bone plates, or the insufflation of hydrogen gas, omental grafts, etc., and no matter how completely these may be supplanted by other devices and methods, the fact shall remain that the spirit and the enthusiasm created throughout the country by Dr. SENN'S work, shall remain as an imperishable and luminous point in the history of intestinal surgery and of its modern renaissance in America.

Should anyone doubt the profound impression produced by these investigations on the surgical world outside of America, let him open the pages of two recent and most authoritative works written by distinguished French writers, "La Chirurgie Intestinale," by JEANNEL (Paris, 1898), and "La suture Intestinale," by MM. FELIX TERRIER and MARCEL BAUDOUIN (1889). In these works not only are chapters devoted to the influence of American investigators and their methods, but the influence that they have exerted on Continental surgery is reflected on every page. Conspicuous among these, and *facile princeps* in international renown, is J. B. MURPHY, whose remarkable invention, the anastomotic button, remains in its original form still the favorite, in spite of many attempted modifications. Few inventions have met with more ready and universal application than this. Notwithstanding the fact that it was only introduced in 1892, its application on human subjects now numbers thousands of cases. In one of the most conservative German clinics, CZERNY'S, alone, it has been applied over a hundred times. In Italy, CARLE and FANTINO of Turin recently reported over sixty applications of the button, with remarkably successful results, in gastroenterostomy, alone. It would be absolutely impossible in an article of this kind to even mention the most prominent of the American surgeons who, during the last decade, have contributed to the advance of this field of surgery and who, either independently or following in the footsteps of SENN and MURPHY, have by more or less ingenious modifications and devices, spread the reputation of the surgery of this country beyond national lines.

It would be most interesting to undertake the study of the appendix and of peritoneal infection from the point of view of American surgical history. We must limit ourselves to the statement that the bibliography of the last two years fairly groans under the burden of the reports of observations and studies by American operators, which show everywhere a measure of success and unrivaled fertility of resources that justify the high regard with which the outside world treats American authority and experience, in the management of this affection. We could continue thus endlessly pointing to the landmarks permanently left by American surgeons in the confines not only of the abdomen and its contained organs, but in the pelvis, in the genito-urinary tract, in the history of hernia, in the operative treatment and therapeutics of malignant disease, in all of which the work of American surgeons has left a profound impression and continues to exercise a dominant sway. But we feel the absolute hopelessness of attempting anything approaching a review of the work done by American surgeons within the compass of one article, which already vastly exceeds the space assigned, and we can only add, what, now nearly a quarter of a century ago, the venerable GROSS, in closing the last lines of his admirable sketch on American surgery, said: "The surgeons who are now rapidly passing away—those links between the past and the present—who have so long borne the heat and burden of the day—are not afraid to entrust to their younger brethren the sacred duty of carrying on the work which they have so zealously labored to advance and improve. They feel assured that the honor, the dignity, and the glory of American surgery will be safe in their keeping and that the century closing with the year 1876 will open for medicine one of the brightest pages in the history of human progress." These impressive words, spoken in the spirit of a parting benediction, surely have come as true as if uttered in prophecy, as witness the records of the last two decades. Let us now add: As it hath been, so may it be, again and forever more—*Per secula et ad Eternitatem.*

R. W. MATAS.

PROGRESS IN MEDICINE.

The space is too limited to go beyond the most superficial résumé of the progress of internal medicine during the century.

He who makes close inquiry into the development of medical thought in this country can not fail to be impressed with the philosophic breadth of view of the leaders in medicine. Though the bulk of the harvest has not been great, it is commensurate with the gleanings, and, indeed, save probably in paleontology, exceeds that of the contributions, in other lines of biology. It must be remembered in the formative stage of our civilization in all departments of knowl-

edge, perforce, the development has been on purely practical lines. Hence, the surgeon, the obstetrician, the therapeutist, the practical specialist, has been the bright star of the medical firmament, and to him most credit has been given. Apart from the reasons which obtain in all departments of knowledge—the direction of energy to creation—the absence of hospitals and laboratories, has militated against that patient accumulation of facts which is essential to philosophic induction in internal medicine. When we contemplate the number and variety of the contributions to internal medicine, we need not feel abashed, however, nor for one moment despair of this department of medical knowledge. At the outset, one hesitates whether it would not be better to narrate the methods by which our confrères accomplished their mighty labors; how GERHARD and BARTLETT, BOWDITCH and FLINT, MITCHELL and DA COSTA first gathered their harvest. As this contribution is rather a record of acts than of methods, we must be content with a brief summary of our doings, leaving much unsaid that should be said, and much undone that should be done. It seems paradoxic to say that the death of RUSH in the beginning of the century was auspicious for the advance of medicine in our then new country. The Father of psychiatry, the SYDENHAM of America, philosopher and observer, left a name which well might inspire the workers in the new field. Moreover, he showed well the possibilities of the time and nation. It is needless to refer to his great contributions.

Following close on, came one whose star grows brighter and brighter as the decades roll by, for GERHARD was the founder of clinic medicine and clinic observation in this country. His labors to distinguish typhus and typhoid fever are well known. His papers on the cerebral affections of children (1834) are classic. With PENNOCK, he wrote exhaustively and scientifically on physical diagnosis and diseases of the heart and lungs (1836). After RUSH he became the American authority in clinic medicine.

Preceding GERHARD by a few years NATHAN SMITH'S little monograph on typhus fever must be referred to because of the acumen and reasoning powers displayed in its production. Around GERHARD, and following him on his lines of observation and reasoning, were STILLÉ, MEREDITH CLYMER (relapsing fever) and MEIGS (diseases of children), and a host of others, each of whom later presented monographs of the highest scientific value. From STILLÉ alone came the systematic work on general pathology (1848), the brochures on cholera, on cerebrospinal meningitis, and on fevers, in addition to his great work on therapeutics. In the second quarter of the century JAMES JACKSON, Sr. and JAMES JACKSON, Jr. were making contributions to medicine of prominent scientific value, while around JACKSON, Sr., as an infective center, BIGELOW, BOWDITCH, and a host of others arose. JACOB BIGELOW recalls to us the great philosophic papers on the "Natural History of Disease" (1835), which attracted universal attention throughout the medical reading world. BOWDITCH'S studies in lung and heart disease are classic (1839), while to him we undoubtedly owe the present completeness and utility of paracentesis (1839).

About this time—1838—there was issued from the pen of the elder GROSS the first systematic work on pathology, speaking for its author a breadth of view and scientific "geist" equal to that of the broadest mind in any land. The volume is still prized by the venerable and gifted VIRCHOW. No doubt GROSS was inspired by the studies in pathologic anatomy of HORNER and by his exhaustive and hitherto undescribed account of the lesions of epidemic cholera. About this time, too, appeared a little monograph by WARE on "Delirium Tremens," which will always attract attention by the evidence of close observation it bears, as well as by its originality.

In 1842 appeared BARTLETT'S great work on "Fevers," in these bacteriologic days as fresh and true to life as when first issued. It remains one of the world's great contributions to the clinic study of fever, and with BARTLETT'S other essays, places him in the front rank of the renowned contributors to medical science.

About the middle period of the century a small monograph appeared, which for scientific insight into the etiology of disease, anticipating by even more than prophecy, the modern "germ theories" of disease, equaled the poetico-scientific glimpse of the doctrine of evolution by GOETHE, which anticipated the works of DARWIN and WALLACE. J. K. MITCHELL'S work on the "Cryptogramic Origin of Fevers" will remain for all time, the suggestive product of a mind which exhibited more than the traits of scientific genius.

About this time, too, began the first of a long series of clinic contributions to medicine which ranged over half a century, and which remain models of accuracy, precision and of scientific reason to this day. The last of this remarkable series were as fresh, as vigorous, as logical as the first. It is needless to say that the writings of AUSTIN FLINT are not surpassed by those of any contributor in this or any other country. While some few, as ADDISON and BRIGHT and JENNER or TRAUBE or TROUSSEAU surpassed him in number of original observations and conceptions, none contributed more to the accurate description of the natural history of disease than our own peer.

About 1850, the quarter of a century of monumental labors of DRAKE terminated in the production of "The Diseases of the Mississippi Valley," a contribution of great scientific value, not alone because of the data it contained, but also because of the method of research employed. During this period a host of papers, notably by Southern contributors, were issued, descriptive of the fevers of that region. SAMUEL DICKSON'S account of dengue, as well as his essay on pneumonia, is a valuable scientific communication, while his philosophic essays mark him for all time as one of the leaders of the country. The essay on "Milk Sickness" by LEA and MCCALL was a marked original contribution. The activity of writers on southern fever stimulated LA ROCHE to produce his great contribution on "Yellow Fever."

With the onset of the war Southern contributions ceased, but FLINT and DA COSTA and WEIR MITCHELL continued contributions. DA COSTA'S papers on heart and lung diseases, and the method of distinguishing them, culminated with the great treatise on "Medical Diagnosis" (1866). The so-called Gerhard's sign and Wentrich's phenomena, were described long before the German papers appeared, in his papers on "Auscultary Percussion." Moreover, who does not know of DA COSTA'S "Irritable Heart"? The contributions of this distinguished clinician are as bright, as fresh and scientific as those of forty years ago.

The war brought with it a literature equal to that of any previous war, and diseases of camp life were ably discussed, notably by J. J. WOODWARD. It, too, is responsible for the epoch-making work of WEIR MITCHELL, resulting in many substantial contributions to medicine which will always be quoted, and in that original production—his work and that of MOOREHOUSE and KEEN—on "Diseases and Injuries of the Nerves." MITCHELL'S labors resulted in the production of the broadest and most scientific communications yet presented on nervous diseases. His inductive propositions of the relation of eye-strain to nervous disorders were none the less true, although revolutionary. The culmination of his years of close observation and accurate reasoning, in the promulgation of the theorem of rest in the treatment of disease, is one of the most brilliant as well as scientific pieces of work of this era, and places practical American medicine on a plane with that of any country. MITCHELL, too, has been an infective center, and from his wards and laboratory have come most valuable contributions.

In 1870 appeared WOOD'S studies on "Thermic Fever," a paper in which the nature of the process was determined. PEPPER at this time and later was making scientific contributions, notably on anemia, lung diseases, relapsing typhlitis and other affections. The excellent work of three-quarters of a century seems to have been a preparation for that of the last quarter. To review it for our present purpose would be to make invidious distinction, with our space so limited. Moreover, the work has been so recently done it is familiar to all. To place in array the work of that prince of clinicians, WILLIAM OSLER, would be to occupy four times the space allotted to us. The infective center of enthusiastic research in past years has been spoken of. It is just as important to refer to these centers, from which—to the glory of this era—are coming solid contributions to the medicine of the century. OSLER is the center of one area of infection. WELCH is stimulating labor in another. Who is not familiar with the notable contributions from the Johns Hopkins school? FITZ and COUNCILMAN and SHATTUCK are in another arena, and the contributions to medicine from Boston are of the greatest value. Pancreatic disease, intestinal obstruction, appendicitis, diseases of the blood, are subjects upon which great light has been thrown by this coterie. DELAFIELD and JANEWAY and KINNICUTT have their arenas, and with the great laboratories at their command, are bound to yield brilliant results.

From the Pepper Laboratory in Philadelphia and the other hospital laboratories, stimulated by TYSON and WILSON and HARE and MILLS, a great group of contributors are furnishing scientific contributions of the highest merit. But the older centers have their rivals, and STOCKTON at Buffalo, DOCK at Ann Arbor, FORCHEIMER at Cincinnati, HOOVER at Cleveland, WESTBROOK at Minneapolis, DAVIS, BILLINGS and HERRICK at Chicago, are spreading the infection of enthusiastic effort, and adding immeasurably to our knowledge.

So, as we increase in wealth, our means to study increase, and before long the labors of the enthusiast in the center of the country will be as valuable as that on the seaboard. For the future of medicine, the outlook was never brighter, and it remains only to congratulate the AMERICAN MEDICAL ASSOCIATION and the great journal which it commands, that to them is given the privilege, to render incalculable service to the science of medicine at the dawn of a new century.

JOHN H. MUSSER.

PROGRESS IN GYNECOLOGY.

At the dawn of the nineteenth century the then nebulous profession of the United States had to its credit but few achievements in what long afterward came to be known as gynecology. Those achievements, however, in the intelligence of their conception, in the skill of their execution and in the brilliancy of their results might well have been accepted as prophecies of those broader activities by which America has gained a well-earned primacy in this department of the healing art.

As early as 1764 JOHN BARD of New York operated for extrauterine pregnancy, while WILLIAM BOYNHAM of Virginia operated by celiotomy for the same condition in 1791, repeating the operation with equally satisfactory results eight years later. It would seem indeed that America laid the foundation for latter-day practice in the treatment of this condition, for, according to JENKS, CLARK (1806) delivered an extrauterine fetus through the rectum, introducing his whole hand into the bowel for the purpose—thus anticipating SIMON by many decades in that method of exploration. JOHN KING of South Carolina incised (1816) the vault of the vagina and applied the forceps, by means of which, and abdominal pressure, he removed the living product of an extrauterine fetation—saving not only the child, but the mother. The operations for extrauterine pregnancy, up to this time, and for several decades later, were confined to either the matured or degenerated fruits of conception. In 1849, however, HARBERT, another American surgeon, first suggested the operation of celiotomy for ruptured tubal pregnancy in the early stages, but the practice was not adopted until after STEPHEN ROGERS of New York (1866) again urged its claims. It was thus that American initiative laid the foundation for a practice which bore its first fruition in the hands of TAIT fifteen years later, and which must be looked upon to-day as one of the most beneficent that science has vouchsafed to woman.

The intelligent daring of the surgeons of New York, of Virginia, and of South Carolina, in the management of extrauterine pregnancy found a worthy exemplar in a young surgeon of the wild interior in the treatment of a then hitherto fatal condition. EPHRAIM MCDOWELL of Danville, Ky., did the first ovariotomy in the history of the world, in 1809. This operation, which was given to the profession seven years later, was but slowly adopted. It was, however, finally taken up by a galaxy of brilliant men such as NATHAN SMITH of Yale (1821), ALBAN G. SMITH of Danville (1823), DAVID L. ROGERS of New York (1824), J. C. WARREN of Boston (1850), ALEXANDER DUNLAP of Ohio (1843), WASHINGTON L. ATLEE of Philadelphia (1844).

JULIUS F. MINER of Buffalo devised (1869) the operation of removing intraligamentary cysts by enucleation. The various other modifications which have been made in the original procedure of MCDOWELL have been abandoned, and the operation, as he did it in his first case, is, with slight exceptions, the accepted operation by latter-day surgeons. The universal adoption of this American operation by the profession of all countries has given to womankind an increase of years beyond the possibility of computation.

The plastic surgery of the female genital organs had its origin in the genius of SIMS, who (1842) laid the foundation of that department of gynecology. The story of his adaptation of the pewter spoon, of the evolution of the duck-bill speculum, and of the first aseptic suture material—silver wire—with its fastening by perforated shot, is a part of the romantic history of medicine in our great Republic. By these devices vesicovaginal fistula became a curable condition, and pathologic states of the vagina, the cervix, and the uterus became intelligible and remediable. Thus, SIMS himself gave (1856) to the profession the operation of colporrhaphy for the relief of descensus uteri, of cystocele, and of rectocele. In the wake of this extension came the operation for the repair of the lacerated cervix by EMMET (1869)—one of the most valuable resources of the surgical art. A little later BOZEMAN and EMMET devised the operation for drainage of the bladder for the cure of chronic inflammation by incision of the vesicovaginal septum. The adoption of the Sims speculum—or the principle that it exemplified—made possible the successful revival of vaginal hysterectomy, after futile efforts at its adoption early in the century and after it had fallen into disuse during a period of forty years.

Numerous other operative expedients have been brought similarly within the range of possibility. Thus the operation of ureterovesical implantation, devised by PARVIN of Philadelphia (1866), could not have been done before 1842, and what is true of this operation is true of a large number of other measures for the repair of the vagina, the cervix, and the bladder.

Intrauterine surgery, first made possible by the more or less imperfect instrument of RÉCAMIER, acquired a new impetus under the facilities afforded by the invention of SIMS. Intrauterine explorations became exact after JOHN BALL of Brooklyn (1873) first practiced dilatation of the cervix by divulsion, and in the wake of this advance followed the various intrauterine operations, such as curettement, morcellement, etc.

Dr. GILMAN KIMBALL, of Lowell, Mass., was the first, according to KOEBERLE of Strasburg, to publish (*Boston Med. and Surg. Jour.*, May, 1855) a case of vaginal extirpation of the uterus for fibroids, "successfully performed upon a correctly established diagnosis." He made valuable contributions, not only upon this subject, but upon such topics as gastrotomy and ovariotomy.

In 1865 ROBERT BATTEY of Rome, Ga., "conceived the idea of producing an artificial menopause for the remedy of disease," and he adopted this conception as the basis of practice, Aug. 17, 1872, by removing the unenlarged ovaries through an incision made into the cul-de-sac of Douglas. In the adoption of this original surgical conception, BATTEY, jointly with TAIT in England and HEGAR in Germany, contributed to the material advancement of pelvic surgery. While the object arrived at by his operation was different from that which actuated each of the others, and while the central idea of his practice has been departed from by the profession, he was instrumental in demonstrating the feasibility of oöphorectomy, and the after-history of many of his cases showed the beneficence of his procedure. BATTEY operated by vaginal section for the cure of otherwise incurable "neuroses"; TAIT operated by celiotomy for the removal of organically diseased ovaries; HEGAR'S object was to control hemorrhage. It is from these several starting-points that intrapelvic surgery may be said to have developed. In the course of development the central ideas of these three original operators received modifications at the hands of the profession. Of the various ideas, those of BATTEY have been assailed the most vigorously and have undergone the most radical changes.

In the first place, the vaginal route was abandoned for good reason, as an avenue of approach, and in the next place many of the so-called "neuroses" associated with intrapelvic symptoms were found to have no dependence on ovarian states as etiologic factors. But over and above this criticism, and over and above these contrary theories, stood the fact that many of BATTEY'S "neurotic" cases, that had defied all other kinds of treatment, were cured by and remained well after the extirpation of the ovaries. Facts such as these withstand the assaults of theorists and remain to be explained in the light of a widening science, after the passions of controversy and ambition shall have subsided. Science is now revealing that many of the small ovaries of BATTEY'S cases were, after all, very much diseased, and science is beginning to show, in a demonstrable way, what for a time it seemed to discredit, viz., the relation between these really diseased ovaries and the very "neuroses" of which BATTEY wrote. It is no unsafe prediction to say that a widening experience and a judicial frame of mind on the part of the profession will give to the doctrine of BATTEY a clearer definition and as honorable a place in the arcana of science as may be hoped for by those

with whom his name has been associated in the controversies of the past.

The development of gynecology in America has been characterized by the same cycles that it has defined in other countries. The so-called "mechanic doctrine" of uterine pathology, taught with transient success by HEWITT in England, was in a measure anticipated by HODGE of Philadelphia, who devised (1830) a pessary for the correction of retrodisplacements of the ovary. It is to be said for the doctrine of HODGE that it was founded in rational pathology, and for his device that it was and is the least objectionable of any that has been given to the profession for the purpose. It would doubtless stand to-day as the chief expedient for the correction of these displacements if it were not that its use has been supplanted in the hands of intelligent gynecologists, by the vastly more rational and more satisfactory surgical means. Even yet, in the absence of proper operative facilities, it is probably the means of bringing more relief to women of this unfortunate class than any other instrument in the hands of the general practitioner.

The American Gynecological Society was organized in 1876 and has since devoted itself to the exclusive cultivation of this department of science. Its membership has embraced and now includes many of the most distinguished gynecologists of America, while its annual volumes are among the most valuable contributions to the literature. The American Association of Obstetricians and Gynecologists was organized in 1888 for the purpose of bringing into association not only the practitioners of gynecology but those identified with the allied branches of abdominal surgery and obstetrics. Its membership now embraces a majority of the teachers of those branches in the medical schools of America, and each annual volume of the "Transactions" is uniformly a record of most progressive work. These two organizations are strictly national in their scope and membership.

The Southern Surgical and Gynecological Association was organized in 1888, and had for its *raison d'être*, first, the necessity of a society which would meet in the great territory of the South, which was but rarely visited by the strictly national organizations; and second, the desirability of considering in the same arena topics relating not only to this special department, but also to the general subject of surgery. The membership in this society is not sectional, and its Transactions are of universal value to the profession.

The Western Surgical and Gynecological Society is a Trans-Mississippi organization of the same character. In practically all of the large cities there are organizations devoted to this special field of work, some of them continuing to exist under the more generic title of "obstetric societies." The Proceedings of these associations compose an important modicum of the medical literature of the country.

Gynecology has been and is represented in the periodical literature by several important publications, devoted exclusively to this expanding department of practice. The first journal devoted exclusively to this subject was issued in 1869, under the editorship of Drs. H. R. STORER, G. H. BIXBY and W. LEWIS, and was known as the *Journal of the Gynecological Society of Boston*. A year previous, however, the *American Journal of Obstetrics and Diseases of Women and Children* began its career under the management of Dr. B F. DAWSON. Issued originally as a quarterly, it has become, under the management successively of MUNDÉ and WELLS, a large monthly, filled with original matter of a high grade. *The American Gynecological and Obstetrical Journal*, which began publication in 1885, is to-day, under the brilliant management of its editor and proprietor, Dr. J. DUNCAN EMMET, an exponent of the best literature of the subject in America. Other journals have been devoted to this subject, and a few of them are yet extant. Practically the entire periodical medical press of the country conducts a department devoted to the review of gynecologic literature, while original contributions on the subject are, as a rule, a feature of each issue of every general medical journal in the country.

The status of gynecology in medical education in the United States is nowhere doubtful. No medical school in the country is without a professorship in this department, the first one having been established by Dartmouth College about thirty years ago, the incumbent at that time being the celebrated Dr. PEASLEE. In many instances gynecology was attached to obstetrics, in charge of a single professor, but with the growth of the subject, such an arrangement has been found impracticable and exists to-day only as an anachronism in a few institutions of ultraconservative affectations. In a few colleges the surgical character of the subject has been emphasized by changing the title of the professorship to that of abdominal and pelvic surgery. It may be observed everywhere that gynecology is broadening its scope in accordance with these conceptions, and the dawn of the next century will recognize in the gynecologist not an obstetrician upon whom accident imposes the necessity of doing some reparative tinkering about the female genitalia, but an accomplished surgeon who is something more than a surgeon. This has been brought about through the teachings of the distinguished teachers, past and present, in this department.

It is quite out of the question in an article such as this to recount the achievements or even the names of the American pioneers in gynecology. The galaxy was a brilliant one and embraced such names as ISAAC E. TAYLOR of New York, who did an original operation for rectovaginal fistula (1856); WALTER CHANNING, who wrote (1833) about the "Irritable Uterus"—that in later years comprised the basis of the French school of practice; GUNNING S. BEDFORD, who established the first clinic for women in America; J. C. NOTT, who removed (1844) the coccyx for coccygodynia; HORATIO R. STORER, who was a pioneer in advocating the recognition and adoption of gynecologic practice in hospitals for the insane; E. R. PEASLEE, who (1854) advocated and adopted the principle of drainage and intraperitonal irrigation after ovariotomy twenty years before LISTER propa-

gated his doctrine and before the adoption of the practice in other countries: JAMES P. WHITE, who (1856) demonstrated the reduction and consequent curability by that means of chronic inversion of the uterus; T. GAILLARD THOMAS, whose work was the accepted text-book on gynecology in America for two decades, the earlier edition of which yet stands as a model of scientific arrangement and finished English; J. C. REEVE of Dayton, whose original investigations in anesthesia are among the most valuable contributions to the subject. It is not practicable to continue the list, embracing as it does the names of FORDYCE BARKER, WM. GOODELL, W. H. BYFORD, A. REEVES JACKSON, EDWARD W. JENKS, JULIUS F. MINER, D. HAYES AGNEW, and many others equally illustrious, who are now with the silent majority. It were invidious to mention those who, although advanced in years, yet abide to watch the fruition of their work in the hands of those who now toil in the vineyard.

CHARLES A. L. REED.

PROGRESS IN OBSTETRICS.

When obstetrics at the close of the ninteenth century shall render the dawn of the twentieth her inheritance, she will do so with great pleasure and with no little pride, for out of the few imperfect talents she received from the eighteenth, the nineteenth century has developed many perfected ones, and added more. Truly, when entering the Valhalla of Effort will she be greeted with the hallalujah: Well done, thou good and faithful servant, unto you it has been given to be faithful over a few things, and to have enabled many to enter into the joys of blessings otherwise impossible.

Why so great rejoicing and so loud a panegyric? For never since the beginning of the age of gestation and labor has its mortality and morbidity been so low or so favorable as at the present moment—the close of the nineteenth century. Well may the twentieth century receive with pride such a legacy; her women rejoice.

Judging by the light possessed to-day, we can readily appreciate why obstetrics was not so perfectly developed a century ago as to-day, and, therefore, rendered less perfect services, which for a long time failed to overcome the prejudices that existed in the minds of the "female world," society, against the man midwife, the accoucheur. In the Colonies, with two or three exceptions, there were no schools, and even these were without the concentration of clinic and manikin material common to the schools of Europe, now common to ours. Necessarily, they were more especially didactic, and in many cases with texts teeming with hypotheses and theories of cause, effect, and therapeusis which were theoretically more perfect of effect than practically.

Opportunity to make inquiries and to learn midwifery, for the student, was practically limited to the observations he could make in the practice of his preceptor and in those of his friends. His instruction was, like that of his text-books, derived mostly from English and French sources, imperfect when viewed in the light of the advanced state of obstetric knowledge of to-day, but authoritative in his day, and tended to make him but a reflection of the imperfect accoucheur of his time. He did fairly well with normal labor, yet for those cases where special therapeusis and operative training were urgent, namely, in all forms of abnormalities of gestation, labor and the puerperium, he was necessarily as short-coming in his results as his prototype. As a consequence, society continued to be imbued with and but reflected the same sentiment toward the accoucheur that was brought from and entertained in Europe, and even in royal circles; the female world looked on the midwife with more favor than on the accoucheur. This curtailed opportunity and naturally checked advance.

To give an idea of the state of the sentiments entertained by the female world, DR. SHIPPEN, who had studied with the famous DR. SMELLIE, and who delivered the first special course on midwifery in America, in his lectures "pointed out what was necessary to make a man midwife an adept in his profession, and *to gain the good opinion of the female world.*" This was in 1762. So prevalent was the prejudice that sixty years afterward DEWEES again mentions it.

Handicapped as they were from lack of conveniences, these early days sparkle with many cases of individual effort in successful obstetric surgery, which speak most eloquently for their originality, daring and skill. (See "Progress in Gynecology.") About 1794, CHARLES MCKNIGHT of New York, contrary to opinion, removed by celiotomy, with recovery, a 9-months fetus from an extrauterine pregnancy, thus anticipating the evils from chronic encapsulation, or suppuration leading to fistulæ through which the fetal parts were cast off or were extracted. These latter characteristics were the usual sequelæ of the "leave-it-to-nature treatment" following ruptures of extrauterine pregnancies. Early text-book authority suggests the let-alone treatment for the like uterine ruptures where the fetus had escaped into the abdominal cavity, unless extraction could be accomplished by turning and drawing the fetus through the uterine rent and the parturient canal. These early extrauterine operations must have exercised some influence, for in 1800, American authority recommends: "if can not extract per vias naturales, then try gastrotomy."

Though these triumphs were brilliant, they could not be general; they could only serve as guiding stars to direct and encourage further effort, with what success contemporaneous abdominal surgery amply testifies. For obstetrics to more truly and generally progress and win for herself greater confidence, it was necessary to inquire along such lines as would produce some method or means wherewith to overcome the intense physical suffering—pain accompanying operative labors—and the great mortality and morbidity following all forms of labor, both the normal and the abnormal. This great step was finally achieved by the almost simultaneous introduction of the law of asepsis, 1847, and the introduction of artificial, general anesthesia, 1846—two of the greatest steps marking the advance of medicine since its conception. With these, and only through these, could come increased light, life, and opportunity.

They conserved the normal labor; opened up paths of successful therapeusis and operative procedures never before possible, nor attained. From this moment on, the progress of obstetrics was rapid, accurate, and life-giving.

1. Since the introduction of this law of asepsis, puerperal sepsis has lost much of its terrors—epidemics are no longer feared. The principle of cleanliness is an ancient one, but principles unless expressed in laws, are not adhered to. Though credit for the establishment of this law of asepsis belongs to the immortal SEMMELWEIS, still America, through her immortal OLIVER WENDELL HOLMES, can justly claim a share thereof. HOLMES—even before SEMMELWEIS, in a paper on "Puerperal Fever as a Private Pestilence," first published in 1843 and republished in 1855—advanced the principle that puerperal sepsis was due to contagion, and called attention to the unknown American physician, who, in 1842, had written of his experience during an epidemic of child-bed fever, during which he confined seven women, that by changing his clothes and washing his hands in a chlorid of lime solution, he prevented further infection. HOLMES certainly advanced the principles of asepsis, and had there been the rapid dissemination of to-day—for importance wanes with distance and time—SEMMELWEIS would have been forestalled, for SEMMELWEIS later came to the same conclusions, and used the same solution for his hands. But it was left to SEMMELWEIS, through the force of his comparisons of the parallel aseptic and non-aseptic wards, and the greater weight of the "brute force" of his comparative figures, to form out of HOLMES' principles a law—the law of asepsis. It is not yet clear but that surgery owes obstetrics some little credit for suggestions out of which she developed her Listerism. Through the exercise of asepsis, the former mortality of from 5 to 25 per cent., following normal labor, has been reduced to from .5 to 2 per cent. to-day; the percentages of abnormal labor show a like favorable decrease; maternities, which were compelled to close because of sepsis, have never since ceased to be open.

2. Credit for the introduction of artificial anesthesia belongs to America through one of her famous sons, Dr. MORTON, although credit for its first use in obstetrics belongs to SIR JAMES SIMPSON, for he repeatedly used it in midwifery before March 22, 1847. To N. C. KEEP of Boston, who applied it on April 7, 1847, to a case of normal labor, belongs priority in America. W. CHANNING, on May 7, 1847, followed as second, applying it to a case of instrumental labor—forceps followed by craniotomy. The determined opposition it met here was as in Europe; but this soon disappeared as its beneficent qualities were more often witnessed and better understood. Artificial anesthesia brought about relaxation and loss of consciousness without destruction; by neutralizing pain and shock, it opened paths never before so readily or so safely pursued to rescue life; soon all bars were felled before obstetric effort in operation. Abdominal operations had been practically abandoned because of the great shock and high mortality. Formerly, to induce relaxation and bluntness of sensibility for operations like the forceps, pelvic extractions and removal of adherent secundines, recourse was had to bleeding to the point of faintness and loss of consciousness—a 30 to 60 ounce bleeding being no exception, and repeated as thought necessary. This was followed in many cases by tedious, when, recoveries. To-day chloroform and ether quickly and perfectly permit all forms of operations. The Cesarian section mortality has been reduced from 60 to 90 per cent. to the present 8 to 15 per cent. low proportions; the extra-uterine pregnancy, instead of the rest, blister, opium, clyster, tentative treatment, with its greater mortality and morbidity, now is met with early diagnosis, anesthesia, the knife and cure.

Though these two epoch-making steps were the most important factors which have led to the present more perfect obstetrics, they were not all.

3. In each of the important steps marking the advance of the perfected Cesarean section of to-day, American effort plays a foremost initiative rôle. These more favorable Cesarean percentages were only possible as the three essential dangers were overcome.

The first was from primary hemorrhage and shock, which was increased by the terrors of the preanesthetic period, the mental agony of anticipation and being held down by numbers, the excruciating pain, etc.; continued general anesthesia has overcome this danger.

The second was the dangers from sepsis; asepsis has overcome this danger.

The third was from secondary hemorrhage and sepsis; the uterine suture has overcome this danger.

The secondary hemorrhage and sepsis, especially lent to the high mortality of the Cesarean section, and, as a rule, came from the ununited walls of the nonsutured uterus, plus the anciently well-known factor, the infective uterine discharges. This danger was a long-recognized one, to successfully overcome which had been the effort of many. Strange to say, authority was usually against the suture. In 1769, LEBAS of France, with the transverse incision, Cesareanized a patient three days after the onset of labor; to favor closure of the uterine incision he sutured with three stitches; she recovered. Notwithstanding this favorable result, authority again arrayed itself against the suture and continued so. For CAZEAUX, reflecting European opinion, recommended that "the uterine wound demands no other precaution than that of being cleansed," to which an encyclopedic authority added in 1834, "although an unskilled surgeon did introduce sutures, which it was found necessary to remove." So late as March, 1863, J. G. SWAYNE, in the London Obstetrical Society, reported a case of Cesarean section. At the post-mortem the external edges of the wound were found to be gaping. In the discussion, SPENCER WELLS questioned whether the uterus had been closed by sutures, though he was not aware whether sutures had been used in any case. ROBERT BARNES, referring to WELLS' suggestion that the uterus be sutured, stated that sutures were not to be used on account of the dangers of uterine inflammation. SWAYNE, in closing, replied that it was gener-

ally considered that sutures were not to be used (This by way of history.) This adverse dogma to the contrary—and which for many years colored opinion and retarded uterine suture—American effort continually found expression toward overcoming this difficulty. In 1828 in Virginia, the uterine suture was applied with success following Cesarean section; the patient died upon the twelfth day, not as a result of the operation, but from an epicurean indiscretion perpetrated on the tenth day. Again, uterine suture was repeated with silk in 1851, by G. W. HOMES of Georgia. In 1867 came the almost simultaneous successes of T. B. TOWNSEND of New Haven, with three hemp sutures, and Dr. WARREN BRICKELL of New Orleans, with six silver-wire sutures. From this on uterine suture was general. BRICKELL, in his obstetric lectures as far back as 1856, recommended uterine sutures but was met with ridicule. Before 1878 the value of the uterine suture had been established in America. In that year R. P. HARRIS, in his résumé of one hundred cases of American effort with Cesarean section, unquestionably proved, and with figures, the superior value of uterine suture. Four years later, in 1882, SAENGER of Leipsic, proposed multiple sutures to close the uterine wound, and to him an American collaborator rendered credit for *perfecting* the modern technic of Cesarean section—an altruistic virtue, which modesty alone hinders our transatlantic cousins from emulating.

4. The more general correct knowledge of the diameters and dynamic forces of the pelvis, the parturient canal, and of the fetus, and their favorable relations to each other. This knowledge has to a great extent lent assistance in overcoming the traumatisms and the terror formerly felt for the forceps, the turning and the extraction operations, lessening the uterine ruptures, vaginal, perineal and rectal lacerations, with sequent sepsis, thus decreasing by far their previous mortalities and morbidities. Especially has it tended to the prevention of the many forms of delayed labor, leading to pressure necrosis with its numerous forms of vesical, uterine, vaginal, and rectal fistulæ, with their distressing incontinence, as sequelæ.

Here again, America can claim credit for priority. It was her MARION SIMS who first successfully mastered this long-existing fistula problem that had ever before baffled the best skill of the world. It was this crowning achievement that raised him to among the immortals in medicine, and made him the idol of long-suffering women of not only the New World but of the Old World as well.

5. By means of the clearness gained from a simpler classification of the positions and presentations, and the more perfect knowledge of the pathologic conditions accompanying gestation and labor, to-day, diagnosis is earlier and more accurate, therefore, our therapeusis is more immediate, to the point, and effective. To-day, the *accouchement forcé*, when necessary, quickly and successfully follows the early diagnosis of malposition or maternal or fetal danger; the Cesarean section or the Porro, the endangering fibroid; the celiotomy, the extrauterine pregnancy, ruptured or unruptured. The hematocele, even to a recent period, was spoken of as a separate disease, its differentiation from extrauterine pregnancy being satisfied in a line of uncertain explanation. Many of these must have been accumulations and sacculations of blood due to ruptured ectopic pregnancy. Now, the knife, with the assistance of anesthesia, quickly and permanently restores, instead of the former long-drawn-out temporizing treatment.

6. Like in the useful arts, so in the obstetric art, the tendency of American instrumentation and operation is along such lines where the necessary—not an excessive—assistance, is rendered, and where delicacy of persuasion is the rule rather than preponderance of power. Hence, her instruments are being built more technically, are light, and essentially more handy, instead of the gross and more awkward instruments of before.

7. The treatment of abortion, because of anesthesia, asepsis, and early diagnosis, has also reduced the large mortality and morbidity, ever marking this form of labor, and which in all ages has furnished one of the greatest mortalities of obstetrics.

Eclampsia, its etiology still unsolved, will remain as a heritage for the new century. In its treatment, BAKER of Alabama, in 1859 called attention to the advantages of veratrum viride, and in the hands of others it has continued to meet with success. VEIT, 1887, who claims with the assistance of large doses of morphin to have reduced his mortality to two cases out of sixty, was anticipated in the heroic dose of morphin treatment by C. C. P. CLARK of Oswego, in 1880.

Symphysiotomy has progressed to its natural resting-place. It was reintroduced into America in 1892, after a most useful desuetude, following its initial resuscitation by Sigault in 1777, and its richly deserved relegation to a dignified retirement after a most bitterly fought forensic discussion. Since 1892, after passing through a phenomenal tide-wave of popularity, it has been repudiated by some of its former most earnest advocates. DEWEES, in the early 1800's, mentions a like conclusion. It is now finding its proper level as an exceptional conservative operation of, however, but limited applicability; and, owing to its greater mortality and the increased difficulty in its performance, as was predicted, symphysiotomy has been largely abandoned in favor of the Cesarian section.

A similar but more just fate overtook the gastro-elytrotomy of the early seventies. Pathology and the microscope have shed much light on formerly not well understood conditions; their results have materially assisted in the advance of obstetrics, especially in aiding to recognize and differentiate where and when not to resort to heroic measures.

The serumtherapy of puerperal sepsis is yet in the experimental stage. Some of the reports, after its use, savor more of the amusing hyperbole than of the truer fact.

Organotherapy, the treatment of diseases such as osteomalacia and puerperal sepsis, by the administration of animal extracts, is still in embryo, and, like serumtherapy, is threatened with abortion.

It is to the credit of American practicalism, and in

obstetrics, that exaggeration and inerrancy of technic are soon enlightened before they are permitted an expensive experimentation to prove their want of virtue. Finally, so general has been the progress of obstetrics in all its branches that the obstetrician of to-day can truly claim to be an adept in his profession, for by his works he has gained the good opinion of the "female world."

Congratulations to the unknown and known, who have so nobly contributed to the elevation of this art, and to such a high degree of perfection that it enables even the clever novice to enter in and win, where the master feared to tread and lost! To the twentieth century: As you go, do likewise!

FRANK A. STAHL.

PROGRESS IN THERAPEUTICS AND ALLIED BRANCHES.

The task of reciting the advances made in therapeutics, and in its handmaid, pharmacy, during the years that have elapsed since the ASSOCIATION was established, is by no means an easy one. In the space allotted it is impossible to crowd all the important additions to our means of treating disease by medicinal measures. Only facts dealing with lasting gains will therefore be considered.

While it is true that the discovery of the use of ether and chloroform occurred just before the period covered by these remarks, the far-reaching influence of their use not only for the relief of pain, but also in extending the possibilities of surgical treatment, renders it proper to at least recall the fact that the founders of the ASSOCIATION had all practiced in the preanesthetic days, so to speak, and to them, at the time of our organization, surgical anesthesia was a more recent theme of discussion than is the use of thyroid gland in myxedema to-day. In still another field drugs have aided the surgeon in preserving life and made operations possible which, even with the aid of anesthetics, would have been impossible, namely, the various antiseptic substances, many of them old in the materia medica list, though new in application, and many devised through the skill of the chemist or pharmacist as soon as the demand for such substances arose. While it is true that asepsis has largely replaced antisepsis, these drugs "blazed the way" for the advances which have been made and many of them are still confidently relied on. Upon these matters, the article dealing with modern surgery dwells at greater length.

The introduction of hypodermic medication must not be forgotten. If we turn to the list of drugs which have attained a position in the physician's armamentarium which can not be assailed, it is surprising to find how many have been introduced and proved of inestimable value. Chloral was introduced by LIEBREICH in 1869, the bromid of potassium was but little used even after LAYCOCK wrote of its usefulness in 1853, and salicylic acid and the equally useful salicylates did not come into use until 1875–76. The exhaustive work of STILLÉ on therapeutics, published in 1874, contains no mention of them. Even carbolic acid, which was first obtained by RUNGE in 1834, did not come into general use until long after the time that our ASSOCIATION was organized. Iodoform is another addition to our list of indispensable remedies and equally, if not more important, is nitrite of amyl and the other nitrites, such as nitroglycerin.

If less commonly employed drugs were included in this paper, it would cover many pages, and the newer additions to the materia medica list, derived from the mineral kingdom as a rule, need hardly be named, so late is their introduction, such as antipyrin, acetanilid, phenacetin, salol and similar substances.

From the vegetable kingdom, among the drugs which have come into use during the half century, may be named practically all the alkaloids, or active principles of the more powerful drugs, and as new remedies themselves may be named coca and cocain, hyoscin and its various nearly related alkaloids, such as duboisin.

In addition to these substances we must still remember that many old remedies have been so altered in their physical characteristics and effects by chemic and pharmaceutic advances as to be practically new drugs. This is notably the case with the various salts of mercury, with guaiacol from creosote, and with those drugs depending upon other principles than alkaloids for their activities.

Closely related to these advances are the modern methods of preparing medicines for the sick by the use of the sugar-coated, gelatin-coated and chocolate pill and tablet, by the universally used tablet triturate, the capsule, elastic and hard, and the konseal. Nor is it only in these lines that pharmacy has aided medicine. Even the modern tincture and fluid extract are comparatively recent products. Professor REMINGTON of Philadelphia, in a letter to the writer on this subject, obtained from him while preparing this article, says: "It is a significant fact that the process of percolation suggested first for galenic preparations by the BOULLAY brothers, in France, in 1833, remained practically, in Europe, a dead letter for fifty years, but was enthusiastically taken up by American pharmacists fifty years ago, and soon became the principal lever in the development of pharmacy here. The last edition of the 'British Pharmacopeia,' published in 1898, is principally noted for its complete, though tardy recognition of percolation. But the strangest exhibition of conservatism of European pharmacy, as compared with that of America, is the statement just made public that the committee of the 'French Codex,' now in process of revision, has at last recognized the process of percolation and will adopt it in the new authority. A period of sixty-six years since its first suggestion by the French BOULLAY brothers—'a prophet is not without honor,' etc! American pharmacists may justly claim to have led the world in pharmaceutic science, for whilst they can not claim superiority over European workers in chemic investigation and original research, they have led the world in the application of theoretic researches to practical results in supplying the physicians with preparations made by original and ingenious apparatus, machinery and processes, which have been adopted or imitated abroad."

But the medical profession has not been content

with having placed in its hands new remedies, or old ones in new dress; it has endeavored to employ drugs and remedial measures other than drugs, not on the basis of pure empiricism, but rather on that of knowledge of the process of the disease and the physiologic action of the remedy, thereby changing the treatment from hypothetic art to at least an approximation of scientific study. Further, the fact that we can not tell how certain well-known remedies do good, depends on the second fact, that the pathologist can not tell us in what the disease consists. As compared to the knowledge of fifty years ago, the accuracy with which we can apply remedies to the cure of disease is extraordinary, and the discovery of the effect of quinin on malarial organisms is an instance of this fact.

Side by side with this demand for a clear insight into disease, that our treatment may be intelligent, and closely linked with the improvements which have occurred in the preparation of drugs, physicians are coming to recognize more and more the absolute necessity of accuracy in dosage in two senses: 1, the need of fitting the dose of the drug to the actual needs of the individual, and 2, the need of using pharmaceutic products of known strength. For many years we have required of the chemist that his products should be chemically pure and well proportioned so that in the administration of a compound we know just what the patient is receiving. Thus, the iodid of sodium must contain so much iodin and so much of the base, and no poor product would knowingly be used. More recently the profession has awakened to the knowledge that the same accuracy is needful in remedies derived from the vegetable kingdom, and is realizing the fact that the various influences to which plants are exposed in growth greatly affect their medicinal activity in degree and in kind. One set of digitalis leaves may contain amounts of its principles quite different from others in total quantity and in proportion. Much ergot is physiologically inert and some nux vomica beans contain twice as much strychnin as others. For this reason no important vegetable drug upon the action of which life depends should be employed unless it has been chemically assayed or physiologically tested.

There yet remains to be considered the so-called "organotherapy." In this the most positive advance is in connection with the thyroid gland. Although its therapeutic use is really a thing of the last half of this decade, it has gained for itself the surest footing possible, and while myxedema is a rare disease not met with in daily practice, the remarkable cures which are produced, in cases at one time considered incurable, are really more wonderful than any advance made by the glittering array of new surgical advances. In that rare but more common condition called cretinism, the results obtained are marvelous, and in obesity, scleroderma and other nutritional disorders its effects are only less marked than in the states already named. It is equally worthy of rejoicing that thyroid therapy is not a discovery made by stumbling over a clinic fact, but is a triumph of the two sciences, pathology and therapeutics, walking hand in hand, and that the use of thyroid gland is rational therapy par excellence.

The use of suprarenal gland in Addison's disease for the purpose of raising arterial tension, and locally for the causing of ischemia is also to be remembered. With many of the other attempts at glandular therapy we shall not deal, as many of them are worthless because not rational, or else have failed to produce results sufficiently marked to deserve recognition.

Equally rational, and equally the result of scientific research, is the splendid record of antitoxin in the treatment of diphtheria and the promise of what other antitoxins may do in such diseases as typhoid fever, pneumonia, tuberculosis, and a host of other fatal disorders. These triumphs are of such recent date and are so well known as not to need any description. Let us hope that in the fifty years which are to come the advances made will be even more brilliant and that the body of the medical profession, drinking in its student days from the fountain of original investigation, and casting aside empiricism, may work as a unit in the coming achievements.

HOBART AMORY HARE.

PROGRESS IN PHYSIOLOGY.

The title of this article might, with substantial accuracy, be amended to read not the "progress" but the "rise and progress" of physiology in America. For although there has never been a time since medicine was an organized art, in which a certain body of physiologic knowledge did not exist as the common property of all educated practitioners, yet in the sense of a science expanding by native effort on our own soil, American physiology is scarcely older than fifty years. PRIESTLEY, it is true, driven from his home as an atheist and a Jacobin by the fanatic mob of Birmingham, had carried with him across the sea a century ago, his great discovery of oxygen, and the knowledge that purple venous blood can be changed into crimson arterial blood by bringing it into contact with oxygen. And the famous work of BEAUMONT, "The Physiology of Digestion, with Experiments on the Gastric Juice," the first indigenous research of really notable weight, the first which awakened wide-spread interest throughout the physiologic world, was published in a modest-looking volume at Plattsburg in 1833. But we find no other considerable names in the vacant annals of those earlier years, till in 1852 BROWN-SÉQUARD, a native of Mauritius, Irish on his father's and French on his mother's side, but resident for a time in America, published his investigations on the vasomotor fibers in the cervical sympathetic, in the *Philadelphia Medical Examiner*. This paper, containing some of the most important of all the numerous experiments of that distinguished man, was followed in 1855 by a volume of "Experimental and Clinical Researches," printed at Richmond, where for a time he held the post of professor of the institutes of medicine in the Virginia Medical College. About the same time DRAPER, whose versatile genius ranged over so many subjects, from the solar spectrum to the "History of the Intellectual Development of Europe," was busily engaged in physical and physiologic work, and in 1856 published his "Human Physiology," "copiously

illustrated with microphotographs," the mode of producing which, as he says in the preface of the abridgement of this work, was first invented by himself. The name of DALTON, whose beautiful pictures of the brain are still so valuable, ought also to be mentioned here. So far the growth of physiology on American soil had been fitful and sporadic. Then came the stormy period of the Civil War to divert men's minds from such peaceful pursuits. But in 1864 BROWN-SÉQUARD, who meanwhile had spent several years in practice and in physiologic research in London, was appointed professor of physiology and nervous pathology in Harvard University, where for five years he continued to cultivate his favorite science with the intensity that characterized his whole career. With the appointment of HENRY PICKERING BOWDITCH to the Harvard physiologic chair, less than thirty years ago, the modern epoch of systematic, continuous and fruitful investigation may be said to have begun. From the laboratory which he built up there has since issued a continuous and ever augmenting stream of original work, while his pupils have carried to other schools the scientific enthusiasm, the contempt for slipshod methods and the love of accuracy with which he first inspired them. Among the researches of the Harvard laboratories may be mentioned important investigations on the statistics of growth, on the physiology of the heart and its nerves, on the vasomotor nerves of the extremities, the knee-jerk, the types of respiration, the movements of the esophagus in deglutition and of the stomach during digestion—investigated by an ingenious application of the Roentgen rays—and on the secretion of bile.

While in the early seventies the light of physiologic research was beginning to shine brightly in New England, NEWELL MARTIN, whose work was fated to be cut short untimely, came over from old England in 1876 to fill the chair of biology at the recently established Johns Hopkins University in Baltimore, and by his enthusiasm soon kindled there another focus from which the sacred fire was to be carried in the coming years to many an altar of science in the East and in the West. His researches on the isolated mammalian heart, since so fruitfully developed at Harvard, opened a new field for the investigations of the physiologist and pharmacologist. Under his successor the Johns Hopkins laboratory has steadily maintained its reputation as a center of research. Investigations on the heart and the cardiac nerves, on the circulation in the brain, the vascular changes during sleep, and the internal secretion of the pituitary body are only a few of the many valuable contributions to our knowledge which have emanated in the past few years from this prolific school.

From the Philadelphia laboratories have issued researches on snake poison that have been the starting point of investigations all the world over, as well as interesting experiments on the effects of pressure on the conductivity of nerves, and on animal heat. Nor has New York been idle. From the splendidly equipped laboratories of the medical department of Columbia University have come a series of important researches on the mechanism of deglutition, the movements of the stomach, absorption from serous cavities, the functions of the semicircular canals, and others which the exigencies of space forbid us to mention.

Yale University has turned out a very large amount of work of the best kind in chemic physiology, including numerous researches on the products of proteolytic and amylolytic digestion, the influence of alcohol on digestion, absorption from the peritoneal cavity, and on the metabolic changes produced by phloridzin. In the Clark University too, although its existence only extends over a dozen, or at most a baker's dozen of years, the vitality of physiologic inquiry is attested by the appearance of most suggestive papers on the changes produced in nerve-cells by fatigue and old age, and on other themes. From the University of Michigan have come an important series of researches on the mammalian heart, on the sympathetic nervous system, on the degeneration and regeneration of nerves, on the chemistry of the nucleins, nucleo-proteids and the products of bacterial action, and on the seat and nature of fatigue in voluntary muscular contraction.

In Chicago the record for the brief space during which laboratories for research have existed there is a brilliant one. Papers on such subjects in the field of general physiology, as galvanotropism and the physiologic action of ordinary type ions have followed each other in rapid succession, and notable contributions have been made to our knowledge of the growth of the brain and the localization of the visual and auditory centers.

The limits of our space will not permit us to mention the numerous other institutions in which good work has been and is being done, and we may confidently look forward to a rapid growth in the number of productive laboratories all over the country. And while the output of the American schools is increasing by leaps and bounds, it is no idle boast, but a fact which has come to be well-recognized and freely acknowledged by foreign physiologists, that the average quality of the work is as high as in any country in the world. The crowded columns of the *Journal of Experimental Medicine*, established four years ago, and of the *American Journal of Physiology*, founded last year, are the most eloquent witnesses to the activity of American physiology.

No less significant are the changes that have been wrought in the teaching of this science. Fifty years ago it is doubtful whether a special professor of physiology existed in any school in this country. The subject was usually tacked on, often under its historic name, the "Institutes of Medicine," as a more or less ornamental appendage to some other chair. In 1807, BENJAMIN DE WITT, M.D., lectured on chemistry and the institutes of medicine in the College of Physicians and Surgeons of New York. In 1814 Drs. SMITH and POST were joint professors of anatomy, physiology and surgery in the same institution. In 1824, ROBLEY DUNGLISON, whose "Medical Dictionary" had at one time so great a vogue, accepted, on the invitation of THOMAS JEFFERSON, the chair of anatomy, physiology, materia medica, and pharmacy in the University of Virginia. And Dr. NATHAN SMITH, surely the prince of medical pluralists, filled in his single person for

twelve years not only the professorship of physiology but all the other chairs in the medical department of Dartmouth College, lecturing at the same time—such his exuberant energy—on medicine in the University of Vermont and in Bowdoin College.

It is a far cry from this portentous versatility to the specialism of to-day, when the protest is raised in many physiologic laboratories that physiology is too big a subject for any one man, and when in many schools histology, and in not a few physiologic chemistry, have been split off from the parent stem and erected into separate departments. Spacious and well-equipped laboratories for teaching, as well as for research, are rising on every hand and the time is not far distant when in every school of any standing the didactic lecture of the olden time will have been replaced or supplemented by the practical class. But while much has been done we believe that the revolution is not yet half accomplished, and that he who chronicles the progress of physiology in 1949 will have a tale to tell which will surpass the rosiest dreams of the most optimistic annalist of 1899.

G. N. STEWART.

PROGRESS IN ANATOMY.

On looking back to the beginning of the period which we have chosen for our survey, we are at once struck with the improvements that have occurred in the methods and apparatus employed in all departments of the vast field covered by the anatomical sciences. Before 1850 modern methods of preservative injection were imperfectly known and practiced, cold storage was never employed for cadavers, at least in the more temperate parts of America, frozen sections were not yet invented. The dissecting-room was still the place of horrors that made it the bugbear of novices, reeking with foulness and sickening odors sufficient to daunt any but the stoutest. Microscopes were but rarely used in the class-room, the instruments being either imperfect or very expensive; staining methods and serial sections were unknown and microscopic research was so difficult that it was confined to a few specialists. The history of the early development of the ovum was imperfectly known, the blastodermic membrane not having yet been recognized, and the application of the cellular theory to development was not yet perceived. Naturally, therefore, no clear basis had been established for a comparison of the anatomy of man with that of other vertebrates, and human morphology was, in its infancy, given over to the wild, though often brilliant, speculations of "nature philosophers" like OKEN and SPIX. Anatomy was still mainly macroscopic, and thought by many to be an "exhausted science," the human body being supposed to be thoroughly described and accurately known.

The text-books of this period were mostly derived from European sources. Two excellent ones by American authors should, however, be noted; the "Special Anatomy and Histology" of Prof. W. E. HORNER, the discoverer of the tensor tarsi or HORNER'S muscle, and the "Illustrated System of Human Anatomy" of Prof. S. G. MORTON, who became widely known by his great collection of crania, now in the Academy of Natural Sciences of Philadelphia. In craniology MORTON became more famous than in other branches of our science. His "Crania Americana" and "Crania Ægyptica" were important contributions. His collections were, in 1856, described and commented on by another anatomist, Dr. J. AITKEN MEIGS, who did much to establish the modern views of the mensuration of the skull. No account of this early period is complete without a reference to the works of JEFFRIES WYMAN of Harvard University, who, though not a voluminous writer, was a man of great erudition and philosophic insight. As a morphologist he had no superior. He was the first to accurately describe the arrangement of the bony spiculæ in the neck of the human femur and to contrast it with that in those animals which do not assume the erect posture. He was the first to give a scientific description of the gorilla. His essays on symmetry and homology in the limbs, on the vertebral theory of the skull, on teratologic subjects, on spontaneous generation, and on the dissection of a Hottentot, show him to be an acute investigator and a profound philosopher. It was of him that LOWELL said:

> Nothing to count in world, or church, or state,
> But inwardly, in secret, to be great;
> . . . . . .
> To toil for science, not to draw men's gaze,
> But for her love of self-denial stern;
> That such a man could spring from our decays,
> Fans the soul's nobler faith until it burns.

It was to another Harvard professor, HENRY J. BIGELOW, that we owe the first accurate description of the ileofemoral ligament of the hip-joint and its application to the reduction of dislocations. His work on "The Hip," published in 1869, completely revolutionized surgical practice in this matter. It should not be forgotten, however, that another American surgeon, W. W. REID of Rochester, N. Y., had previously, in 1851, shown many of the facts afterward more completely stated by BIGELOW.

It was in 1849 that we first note the entrance of JOSEPH LEIDY into the anatomical field as the editor of SHARPEY and QUAIN'S "Anatomy." From that date until his death he was an ardent investigator in all branches of anatomical science. In 1861 he published an excellent work on "Human Anatomy," which was thoroughly revised in a second edition, published in 1889. He became especially famous by his investigations of the anatomy of extinct vertebrates and his work on "Fresh Water Rhizopods."

Closely associated with LEIDY are two other anatomists who have done much to extend the fame of American science. These are HARRISON ALLEN and EDWARD D. COPE. ALLEN'S excellent "System of Human Anatomy," published in 1884, is not as well known as it should be, its form not being well adapted to students' use. He is the author of many important and most suggestive papers, especially those on the anatomy of the skull, and his too early death, in 1897, deprived us of one of our most accomplished craniologists. The contributions of COPE are rather to the philosophic side of anatomy and to paleontology. His

fame as a morphologist is world-wide. He deeply studied the problems of evolution and wrote at length on them. His "Origin of the Fittest" and "Primary Factors of Organic Evolution" are well known.

As we come downward the stream broadens, and it becomes impossible to do justice to all within the limits of a summary like this. At Harvard, Professor DWIGHT has worthily worn the mantle left by Prof. O. W. HOLMES. His "Anatomy of the Head," "The Identification of the Human Skeleton," and "Frozen Sections of a Child," are well known.

Prof. C. S. MINOT has made some remarkable investigations in embryology, especially with regard to the structure of the placenta. His large treatise on "Human Embryology" has deservedly become a generally accepted text-book.

At Cornell University, Professor WILDER has for many years past made a special study of the microscopic anatomy of the brain, but he is best known by his efforts to reform anatomical nomenclature. In New York, Dr. HEITZMANN, an adopted citizen, was the author of one of the most successful anatomical atlases that has ever been prepared for the use of students, but is perhaps more famous for his attack on the cell theory as commonly received, teaching that all the cells of the body are connected together by intercellular bridges, a doctrine that has recently received a certain amount of confirmation. Dr. F. D. WEISSE published one of the most valuable of the many dissectors, illustrating it with unusually fine engravings. Prof. GEO. S. HUNTINGTON is the author of a number of myological papers of great merit.

In Philadelphia, Dr. GEO. B. MCCLELLAN has published a work on "Regional Anatomy" that is one of the best extant; Dr. W. W. KEEN has edited, with conspicuous success, several editions of GRAY's "Anatomy," and Dr. PIERSOL is well known by his fine work on histology. One of the foremost morphologists of the period was Dr. RYDER, whose untimely loss is deplored by all lovers of pure science.

In Baltimore, the work of Dr. MALL and of Dr. BARKER of the Johns Hopkins University is attracting attention.

In Washington, the collections of the Army Medical Museum have done much to advance anatomical science, especially along the lines of pathological anatomy. Among the important works that have issued from this source is a memoir upon the human remains found in the Salado Valley, by Dr. WASHINGTON MATTHEWS.

FRANK BAKER.

PROGRESS IN PATHOLOGY AND BACTERIOLOGY.

At some time, it has been said of each of the several medical sciences that its birth and its fosterage to greatness were brought to issue by a single nation. It is a delight of the French to proclaim that France, through her mighty son, PASTEUR, gave bacteriology to the world, and the Germans are chiseling high upon the adamantine pyramids of fame a legend of RUDOLPH VIRCHOW, father and fosterer of the modern science of pathology.

As to America, her part in the development of the basal sciences of medicine had until recently been small, the reasons for which are to be sought in the laws of environment. Her genius, attacking the nearest duty, had devoted itself to the application of foreign-wrought theoretic knowledge in the execution of practical works, and incidentally in the construction of useful sciences. FRANKLIN, applying physical science to the uses of man, made of the lightning of the storm a torch-bearer and a beast of burden. MORTON, applying old laws of chemics and physiology, made painless surgery a realization and subdued the terror —more dreaded than the grim visage of death itself. MCDOWELL, seeking the conquest of pain, applied in an emergency his Scotch anatomic learning. SIMS applied a theorem of physics, BATTEY and EMMETT applied principles of mechanics and gynecology which went forth from America to Europe; a splendid full-blown science came into life.

Thus we see that in the distant past each of the sundry medical sciences seems to have had a more or less distinct national or provincial origin and development. But whatever may have obtained in former time, in the present outlook geographic limitations in science are unknown. Within the last few years America has brought to the sciences of bacteriology and pathology contributions which, in vastness of import, are not second to those of any other country. In 1887 the Americans, SALMON and SMITH, upset at one brilliant stroke all of the then existing hypotheses bearing on artificial immunity. Through their discovery it became known that immunization is possible without the action of living bacterial matter; that an immunity may be secured in a purely chemic way. They succeeded in rendering doves immune against hog cholera by inoculations of bacterium-free solutions of the metabolic products of hog cholera cultures. With this discovery the entire question of artificial immunization was thrown into the province of chemistry, and there began the long line of investigations which have led to successful serum therapy, to the antitoxin treatment for diphtheria, tetanus, etc. BEHRING and ROUX builded upon the works of SALMON and SMITH. Without the American discovery, BEHRING could not have given his announcement to the Budapest congress.

NUTTALL, who disclosed that many species of bacteria are killed by a mixture with fresh blood, and STERNBERG, who overthrew the theories of PASTEUR and CHAUVEAU, have had original parts in the development of a rational and lasting theory of immunity. To the Americans—WELCH, STERNBERG and OSLER —the world of medicine is indebted for its riper knowledge of the pathology of malaria. Our understanding of the pathology, bacteriology and antitoxin therapy of diphtheria has been broadened and benefited by the way-breaking works of PRUDDEN, BIGGS, ABBOTT, FLEXNER, DUNHAM, KOPLIK, COUNCILMAN, MORSE and EMERSON. Within the decade KLEBS of Chicago has given us new knowledge of yellow fever, and VAUGHAN his epoch-making studies of nuclein and nuclein therapy. DUNHAM has exhaustively investigated the nature of the bacillus aerogenes capsulatus, and WELCH and FLEXNER have discovered the

relationship between this bacterium and air embolus. COLEY has originated and elaborated his mixed-toxin treatment of inoperable neoplasms. ROSWELL PARK has taken up the work of establishing a parasitic etiology of cancer, and SENN has labored originally and prolifically on the pathology of tumors.

These are a few of the captain jewels which Americans have placed in the carcanet of bacteriologic and pathologic science within the past ten years. May we not hope, in view of growing national, State and municipal support of bacteriologic and pathologic research, that treasures more vast and more dazzling will be brought out by Americans in another decade, when our sun shall have more fully risen.

J. RILUS EASTMAN.

PROGRESS IN OPHTHALMOLOGY.

To one even slightly acquainted with the subject it will at once be evident that the space here assigned to an attempted enumeration of purely American additions to ophthalmology must limit such a compilation to a mere catalogue of a few of the contributors and contributions to ophthalmic science. An entire issue of this journal would hardly suffice for a proper treatment of the subject.

In the early part of the century, America took a small but active part in the development of ophthalmology. GEORGE FRICK'S Treatise on "Diseases of the Eye," published at Baltimore in 1823, and a later edition, London, in 1828, is the first large addition to ophthalmic literature. Next to SAUNDERS' work it was in this early day considered, even in England, to be the best book on the subject. For the following twenty-five years only American editions or translations of British or other foreign works were accessible to the profession here. In 1850, however, HENRY HOWARD issued, from Montreal, his work on the "Anatomy, Physiology and Pathology of the Eye," a book of 517 pages. In it, among other things, he describes and pictures (page 436) his own invention, an arrow-head knife for the removal of cataract by an easy method. Some years afterward WILLIAMS of Boston, MITTENDORFF of New York, and others published works on the diseases of the eye. It was, however, reserved for H. D. NOYES of New York to publish (1881–1890) the most compiete and most original treatise on this subject hitherto written in America. Since the first edition of this book, numerous other purely American text books of ophthalmology have been printed and they compare most favorably with foreign treatises. Of these "A System of Diseases of the Eye," by W. F. NORRIS and CHARLES A. OLIVER of Philadelphia, requires special mention. This work may well be regarded as the English equivalent of the GRAEFE-SAEMISCH Handbuch and the "Traité Complet" of DE WECKER and LANDOLT.

Of periodical literature, we now have our just share, although the first magazine—the original *American Journal of Ophthalmology*—was not issued until July, 1863. The editor was JULIUS BOMBERGER of New York. It became defunct in 1864, but was soon succeeded by the *Archives of Ophthalmology*, edited by HERMAN KNAPP of New York. This magnificent periodical has for twenty-five years held, and still occupies, the foremost rank among English ophthalmic periodicals. If the distinguished editor had done no other work for American ophthalmology than that involved in editing the *Archives*, he would have earned undying fame, and our lasting gratitude. Other flourishing but less prominent publications are the *American Journal of Ophthalmology*, first issued in 1883, by ADOLF ALT of St. Louis; the *Annals of Ophthalmology*, founded in 1891 by JAMES P. PARKER of Kansas City, and the *Ophthalmic Record*, begun the same year by G. C. SAVAGE of Nashville, Tenn.

Among the older ophthalmologists must be mentioned ISAAC HAYS of Philadelphia, the first editor of the the *American Journal of the Medical Sciences* and a voluminous writer on ophthalmic subjects in the still earlier *Philadelphia Journal of the Medical and Physical Sciences*, 1826 and 1827. His is the well-known Hays' knife-kneedle, pictured in BULL'S edition of SOELBERG WELLS' treatise (p. 339, 1855), regarded by many as superior to all modern instruments of the kind. In the former journal for November, 1831, will be found one of the earliest accounts—by H. MORTON—of the relations of accommodation to convergence. In the *American Journal of Medical Sciences* for April, 1845, will be found an original essay on the subject of "Color Blindness," by EARLE. It is highly probable that an American should share with STROMEYER and DIFFENBACH the honor of devising and making the first operations for the relief of squint. ATWELL (*Phila. Med. Examiner*, February, 1842) tells the following story: "In the year 1812–13 I attended courses of surgical and anatomic lectures delivered before the medical school of Brown University by WILLIAM INGALLS, then the professor of anatomy and surgery in that institute; being subject myself to this infirmity (strabismus) Dr. INGALLS took frequent opportunities to explain to me the method of its surgical cure—he did this by dissection of the eye itself—explanation of the power and disposition of the several muscles appertaining to that organ, and showed me how by a division of one or more of them the eye might be brought to its proper place. In my own case I know he proposed to divide the rectus internus. So strongly was I impressed with the practicability and success of this operation that I strongly urged my father to permit me to submit to the operation; but upon the nature of the operation being explained to him he declined the permission because he feared the effect might be to turn the eye the other way."

So, also, Professor DEWEY of Union College (1849), has a strong claim to recognition as the discoverer of hypermetropia—prior to DONDERS—called by him *neomacropia* (*Am. Journal of Science and Art*, vol. viii).

BLACKMAN'S operation for the relief of spasmodic entropion, said to be superior to HIMLY'S, is described in the *New York Lancet* for June, 1842. Among the early methods of cataract extraction, the *New England Journal of Medicine* (1819, 126) contains the following by GIBSON of Baltimore: "The iris was in the first place dilated by the application of atropa

belladonna. A common sewing needle, slightly curved and armed with a single thread of silk, was then passed through the tunica sclerotica about two lines from the cornea, where the couching needle is usually introduced, through the opaque lens and out of the opposite side of the cornea, at a point corresponding to the one at which it was introduced. The silk being drawn through, and the ends cut off, a single thread was thus left passing through the ball of the eye, and acting on the diseased lens in the manner of a seton. It was feared that serious inconvenience might arise from the irritation produced upon the tunica conjunctiva from the excessive sensibility of this membrane. Fortunately, however, neither this nor any other accident intervened, and at the end of ten days, in both cases, the diseased lens had disappeared, and, in its place, the silk was distinctly seen passing like a bar across the pupil of the eye. The silk was withdrawn, and in a few days the vision was restored. In the third and last case in which this operation was performed it failed, in consequence of the iris being wounded. This caused such an inflammation of the organ that it was deemed proper to withdraw the seton at a very early period. This accident was attributed to not using the belladonna."

Coming to more recent times, it is not too much to say that American ophthalmologists have done quite as much to advance the science of ophthalmology as any other portion of the English-speaking world. In physiologic optics one must mention the works of PRENTICE, DENNETT and KNAPP of New York, SAVAGE of Nashville, GREEN of St. Loius, STEVENSON of Richmond, Ind., WALLACE of Philadelphia, LIPPINCOTT of Pittsburg, PHILLIPS, GOULD and CARL WEILAND of Philadelphia, and many others. ADOLF ALT of Toronto and St. Louis has given the results of his original investigations in the physiologic and pathologic anatomy of the eye in a monograph on the subject.

It is, however, in the domain of the refraction and accommodation of the eye that American research has furnished its most brilliant triumphs, and the world is indebted to American observers for certain definite, easy and satisfactory methods for the determination of the refractive and accommodative condition. A few of these are EDWARD JACKSON, THORINGTON of Philadelphia, WÜRDEMANN of Milwaukee (Development of Skiascopy), JOHN GREEN of St. Louis and PRAY of Brooklyn (earliest and most effective forms of the astigmatic chart), as well as RISLEY and CHARLES A. OLIVER of Philadelphia, CULBERTSON of Zanesville, Ohio, and F. C. HOTZ of Chicago, for optometric instruments.

Anomalies of the extrinsic eye muscles have received much attention at the hands of American ophthalmologists, and the profession everywhere is particularly indebted to GEORGE T. STEVENS of New York (Nomenclature of Heterophoria), G. C. SAVAGE of Nashville (Examination of Anomalies of the Oblique Muscles), ALEXANDER DUANE of New York, H. F. HANSELL and WENDELL REBER of Philadelphia, and many others.

Besides monographs by most of the men just mentioned, a text-book of ophthalmoscopy, containing many original observations of pathologic conditions of the fundus oculi, was published by the late E. G. LORING of New York, and this work is by many believed to be the most valuable of its kind yet written.

WILLIAM THOMSON of Philadelphia is a world-wide authority on color-blindness, and his method of examination of the color-sense is the most complete that we possess. That most useful device, the cemented bifocal lens, was invented by GEORGE M. GOULD of Philadelphia. It was KARL KOLLER who introduced a valuable form of reading-glass for unusually defective eyes. STEVENS' investigations of the absolute s rength of individual muscles, and likewise his invention of the tropometer and other similar devices for this purpose should be mentioned. HERBERT HARLAN'S (Philadelphia) test for pretended amblyopia, RISLEY'S (Philadelphia) rotary prism and STEVENS' phorometer, in daily use here and elsewhere, GEORGE DE SCHWEINITZ' (Philadelphia) and ST. JOHN ROOSA'S (New York) investigations in ophthalmometry form a few examples of America's contributions to the important subject of the examination of the eye. CHARLES STEDMAN BULL'S (New York) "Studies of Orbital Tumors" is everywhere quoted; HAROLD GIFFORD'S name should be bracketed with that of DEUTSCHMANN of Hamburg for original inquiries into the nature of the pathologic processes involved in migratory ophthalmia; WARD HOLDEN of New York and G. E. DE SCHWEINITZ have given us original reports on the pathology of quinin amaurosis. To C. H. WILLIAMS of Boston, C. F. CLARK of Columbus, Ohio, and WILLIAM SWEET of Philadelphia, we are indebted for the most effective use yet made of the Roentgen rays for the detection of foreign bodies in the eye. THOS. R. POOLEY of New York first used the magnetic needle for determining the presence of steel within the globe. L. B. GRADY of Omaha was the first to recognize that sunburn of the corneal epithelium is the cause of the most important symptoms of snow-blindness. The character and true meaning of angioid streaks in the retina were first revealed through the labors of WARD HOLDEN (New York) and G. E. DE SCHWEINITZ. The author first drew attention to the probable causative relation between autointoxication and certain forms of optic atrophy.

There is insufficient room for mentioning the many additions to the therapeutics of ophthalmology for which the world is indebted to America. She partly lays claim to KARL KOLLER (now of New York) for the discovery of the local anesthetic properties of cocain. POWERS of San Francisco discovered the value of amyl nitrite in the diagnosis and treatment of certain forms of toxic amblyopia. The investigations of H. O. REIK of Baltimore and E. A. DE SCHWEINITZ of Washington show that the vapor of formaldehyde is one of the most effective agents for the disinfection of ophthalmic instruments. THEOBOLD first recommended the employment of salicylic acid in "spring catarrh." HAROLD GIFFORD introduced the use of amyl nitrite in the treatment of embolism of the central retinal artery. The gymnastic exercise of weak eye-muscles by means of prisms was first in-

troduced by GEORGE M. GOULD of Philadelphia, and afterward modified by SAVAGE of Nashville.

In the domain of bacteriology—with special reference to ophthalmic diseases—American observers have taken a foremost place. JOHN E. WEEKS of New York divides with KOCH the honor of discovering the most important microbe of acute conjunctivitis, an organism everywhere known as the Koch-Weeks bacillus. I believe it can be shown that HAROLD GIFFORD was the first to announce that the normal conjunctival sac contains pathogenic bacteria that can not be effectively or safely destroyed by any known antiseptic. RANDOLPH first discovered the colon bacillus in the eye, and showed it to be one of the principal causes of panophthalmitis. He also determined the exact nature of "oyster shucker's" keratitis. To W. H. BATES of New York we are indebted for our first definite knowledge of the extreme value of suprarenal capsule as a local anesthetic and astringent. A shield for the protection of the uninfected eye from its affected fellow bears the name of its inventor, BULLER of Montreal, and is described in every text-book here and abroad.

Operative surgery of the eye is almost as well represented in literature by Americans as by Germans. It is possible here to mention only a few worthies. The name of HERMAN KNAPP will be found on the pages of every recent work devoted to this subject, in whatever language it may be written. His extended studies of the various stages of cataract extraction constitute a prominent addition to ophthalmic surgery, and he is the inventor of many instruments used in this operation. One has a choice of North and South America as the home of the originator of the maturation of unripe cataract by direct trituration of the lens—RECALDI of Buenos Ayres or BETTMAN of Chicago. J. A. WHITE of Richmond, Va., introduced paracentesis of the cornea combined with *external* massage for the same purpose. Agnew's (New York) bidet, used in the removal of dislocated lens, is a most valuable instrument, and we are indebted to HENRY D. NOYES of New York for several other devices employed in cataract extraction. AGNEW'S method of dealing with the capsule, as well as LEWIS S. ZEIGLER'S (Philadelphia) V-shaped capsulotomy are well known. Knapp's discission needle is everywhere employed, both at home and abroad. For the removal of soft portions of the lens, LIPPINCOTT of Pittsburg has recently devised an improved syringe and has shown how it can be profitably employed.

The name of GEORGE T. STEVENS may well be coupled with that of LANDOLT as the greatest living authorities on operations on the external eye-muscles, the graduated tenotomy and advancement operations of the former being specially known. E. A. PRINCE of Springfield, Ill., C. H. BEARD of Chicago, and MELVILLE BLACK of Denver, have each discovered original and useful single-stitch methods of advancing an external muscle. Certain operations for ptosis are described in most text-books as originating with J. O. TANSLEY and H. KNAPP of New York and W. H. WILDER of Chicago. KNAPP was probably the first to advance Tenon's capsule.

For the protection of the eye recently operated on, HAROLD GIFFORD first introduced the shield dressing, and FRANK RING of New York devised the papier-maché mask. HARLAN'S (Philadelphia) operation for symblepharon is well known, while KNAPP'S roller forceps for the treatment of certain forms of trachoma has been everywhere adopted. Ophthalmic surgery is particularly indebted to America for the treatment of the conditions resulting from removal of part or all of the eyeball. E. O. BELT of Washington and HERBERT CLAIBORNE of New York have showed us how sponge-grafts constitute a suitable bed for an artificial eye. L. WEBSTER FOX first implanted glass balls in the orbit itself, while BRYANT of Omaha first made use of fenestrated aluminum spheres for the same purpose. A Chicago ophthalmologist, F. C. HOTZ, devised two of the best-known methods of relieving entropion and trichiasis, and is regarded not only in this country but abroad as among the chief authorities on the surgery of the lids. An account of diseases of the lachrymal apparatus would be incomplete without the names of THEOBOLD of Baltimore and the elder WILLIAMS of Boston, whose names are familiarly associated with certain probes for the dilatation of the nasolachrymal duct. Woodward first practiced extirpation of the caruncle and posterior wall of the canaliculus for troublesome epiphora, and it was an American who recommended the making of an opening into the upper part of the nose in incurable stricture of the lachrymal duct. CHARLES H. THOMAS of Philadelphia has devised a very effective lachrymal stricturotome. Finally, S. D. RISLEY of Philadelphia and FRANK ALLPORT of Chicago are well known for their studies of school hygiene in its relation to the eye.

CASEY A. WOOD.

PROGRESS IN OTOLOGY.

In the preface to the first volume of the "Transactions of the American Otological Society" (1874), we are told that until within a very few years the science and art of otology had been almost entirely neglected by the medical profession of the United States. In its very best position otology was an appendage—not always very gracefully worn—to the department of ophthalmology; for in this country, as in Ireland, diseases of the eye and ear have always been connected, both in the minds of the profession and the laity. After the American Ophthalmological Society had attained a certain growth, or, to be more exact, in the fifth year of its age, the question of devoting one day of the annual meeting to diseases of the ear was discussed, but unfavorably reported on. Consequently, on July 22, 1868, the American Otological Society was organized by Drs. AGNEW, NOYES, ROOSA, BUMSTEAD, POMEROY of New York; JOHN GREEN of St. Louis, WILLIAMS of Cincinnati, ROBERTSON of Albany, and RIDER of Rochester, all of whom were members of the American Ophthalmological Society then meeting. To this society much of the advancement in otology in America is due. Its "Reports on the Progress of Otology," which were for several years features of its Transactions, did much in the way of

stimulating research, and even now constitute a valuable index of the earlier development of the science. In this connection may be mentioned the *American Journal of Otology*, 1879–1882, edited by BLAKE, J. ORNE GREEN and others; *The Archives of Otology*, *The Annals of Otology*, etc., the *Laryngoscope*, and the *Journal of Eye, Ear, Nose and Throat Diseases*.

American text-books on diseases of the ear are numerous and valuable. Of these the first were those of TURNBULL, published in Philadelphia in 1872, and of ROOSA, the first edition of whose work appeared in 1873. Others which appeared at short intervals were those written by BUCK, BURNETT, SEXTON, POMEROY, and, somewhat later, BURNETT'S "System of Diseases of the Ear, Nose and Throat"; DENCH, BISHOP, BACON, SCHEPPEGRELL'S "Electricity in Diseases of the Nose, Throat and Ear," and DE SCHWEINITZ and RANDALL'S "American Text-book of Diseases of the Eye, Ear, Nose and Throat;" finally, the section on otology, by TURNBULL and BLISS in "Sajous' Annual" and by BURNETT in GOULD'S "Yearbook."

In anatomy I mention BURNETT'S "Contribution to the Comparative Distribution of Blood-vessels in the Membrana Tympani" (*Am. Jour. Med. Sci.*, January, 1873); RANDALL AND MORSE'S "Atlas of Photographic Illustrations of the Anatomy of the Ear," 1887; RANDALL'S "Statistical Studies of the Foramen of Rivinius and the Axis of the External Canal in their Relation to Intratympanic Surgery" (Trans. Am. Otol. Soc., vi, 89); BRYANT, "Observations on the Topography of the Normal Human Tympanum" (*Arch. Otol.*, October, 1890); HUNT, "A Comparative Sketch of the Early Development of the Ear and Eye of the Pig, Together with a new Account of the Development of the Meatus Externus, Drum and Eustachian Tube" (Report of First Congress Internat. Otol. Soc., 1876); HOWE, "Photographs of the Membiana Tympani" (Trans. Am. Otol. Soc., 1895, vi, p. 217).

From the side of physiology, BLAKE wrote on the "Use of the Membrana Tympani as a Phonautograph" (*Boston Med. and Surg. Jour.*, February, 1875). While BLAKE and GRAHAM BELL were investigating the manner in which articulate sounds were produced when the human Mt. was used as a phonautograph, which traced on smoked glass the curves produced by different vibrations, a suggestion by BLAKE in regard to the means whereby an electric current could be thrown into complex waves by communicating complex vibrations from a membrane like the Mt. to the armature of the magnet, gave the clue to the invention of the telephone (Vermyne: Trans. Am. Otol. Soc., 1878). Other writers from the physiologic side were: BUCK, "On the Mechanism of Hearing" (*N. Y. Med. Jour.*, June, 1874); MAYER, "Researches in Acoustics" (*Am. Jour. Sci.*, Nos. 44–47; Nature, Aug. 10, 1876). He considers the fact that the perception of a tone can not interfere with another one of less pitch is a remarkable physical discovery, and next to the proof of the fact that the ear is capable of analyzing composite musical tones in the constituents of partial tones it is probably the most important gain for our knowledge of the nature of hearing, and will introduce important modifications in the now existing theories on the mechanism and the functions of the ear; BURNETT, "On the Mechanism of the Ossicula and of the Membrane of the Fenestra Rotunda" (*Monats. f. Ohrenheilk.*, v, 7), and BLAKE'S "Summary of Observations on the Effect of the Galvanic Current on the Auditory Nerve" (*Arch. of Sci. and Pract. Med.*, No. iv, 1873), are also to be noted here

From the standpoint of therapy, perhaps the most important work in the history of otology in America began with the publication of SEXTON'S "New Operation for the Radical Cure of Chronic Purulent Inflammation of the Middle-Ear Tract" (Trans. Am. Otol. Soc., 1886, p. 611; 1887, pp. 80, 318). While operations upon the Mt. and ossicles had been performed from the time of KARL HILLY and ASTLEY COOPER, and by SCHWARTZE in 1873 for sclerosis, SEXTON'S was in its essential features new, and of undoubted value. Its later adaptation to non-suppurative cases, as in synechotomy, removal of Mt., excision of malleus and incus, stapedectomy, mobilization of stapes, discission of adhesions, have been practiced to such an extent by American otologists that much has been done finally to determine the therapeutic status of the several procedures.

ROOSA first pointed out the dangers of the nasal douche: "A Case of Pyemia from Suppurative Inflammation of the Cavity of the Tympanum Induced by Use of Weber's Nasal Douche" (*Arch. O. and O.*, vol. i, 1869). In view of present-day opinion, SPENCER'S article on the dry treatment in suppuration of the middle ear (with iodoform and cotton), in the *Am. Jour. of Otol.* (1880, p. 184), is interesting; also BLAKE'S "Application of Paper Discs in Perforation of the Mt." (Report First Cong. Internat. Otol. Soc., 1876, pp. 125, 132); BLAKE'S "Mechanical Treatment of Tension Anomalies by Means of Fine Rubber Strips" (*Arch. Otol.*, April, 1892).

In operations on the mastoid process and for infective diseases of the brain, etc., of otitic origin, American otologists have at least followed hard upon the work of their German and English confrères, and the work of KNAPP, HOLMES, BACON and WHITING deserves mention in this connection.

Mention of instruments should include: SEXTON'S instrument for middle-ear operations; BLAKE'S snare; BACON'S artificial leech; BISHOP'S massage-otoscope; the self-retaining mastoid-retractors of BISHOP, ALLPORT and THORNER; SHEARER'S violin-vibrophone (*Jour. of Electro-Therap.*, January, 1895); CHEVALIER JACKSON'S pneumatic masseur (*Laryngoscope*, January, 1897).

T. MELVILLE HARDIE.

LARYNGOLOGY IN AMERICA.

Although the practical application of the laryngoscope was developed by CZERMAK and TÜRCK, the specialty of laryngology, including rhinology, received its early impetus in America, through the American Laryngological Association. But long before this, HORACE GREEN of New York City did admirable work with the then existing methods, and history informs us that in the earliest days of the Colonies diseases of the throat at times commanded the attention

of the laity and profession. We have American records extending back to 1638, when, in an account of two voyages to New England, made during the years 1638 and 1663, by JOHN JOSSELYN GENT, it is recorded that "they were troubled with a disease in the mouth or throat which had proved mortal to some in a very short time." From this time on little record is left until nearly the same time in the succeeding century, when, in 1735, two sermons on the throat distemper were preached by the Rev. JABEZ FITCH of Portsmouth, N. H. This disease, with its characteristic symptoms, was fully described in an essay by CADWALLADER COLDEN, which appeared some years later.

In 1771, SAMUEL BARD, professor of medicine in King's College, New York, published a very concise treatise on diphtheria, under the title, "An Inquiry Into the Nature, Cause and Cure of the Angina Suffocativa, or Sore Throat Distemper." He gave a careful statement of the diagnostic features and accurately described the morbid appearances of diphtheria. At that time the general treatment consisted of calomel, 30 to 40 grs. daily, for a child between 3 and 4 years of age. This, with an emetic and opiate, constituted the main treatment. In 1774 the disease was again described by Dr. JACOB OGDEN as the throat distemper. Four years later CHRISTIAN FRIEDRICH MICHAELIS came to New York as physician general to the Hessian Staff, and he subsequently practiced medicine in New York City, where he exerted a wide influence on the profession. This distinguished practitioner wrote an exhaustive treatise on "Croup," which circulated widely among the Colonies.

From this time on, each year brought forth a verification or discovery regarding throat diseases. BENJAMIN RUSH, in 1789, published his "Medical Inquiries and Observations," in which croup was classified as Cynanche trachealis, C. humida and C. spasmodica; but that laryngology was then but little understood is painfully illustrated by accounts of the treatment of General WASHINGTON during his last sickness. This consisted of bleedings, in which altogether nearly ninety ounces of blood were drawn, supplemented by inhalations of vinegar and water and the administration of ten grains of calomel succeeded by tartar emetic. RAED, a London physician, naturally concluded that the General was bled and drugged to death.

At the beginning of this century many new facts, gained mostly by autopsies, were presented. In 1808 Dr. JOHN STEARNS instituted a new treatment for diphtheria, consisting of calomel, antimony and senega, and subsequently the treatment for the throat distemper continued along the line of eliminants, while, little by little, the dosage was reduced. A realization that the causes of disease in the throat were not understood, and that the symptoms were often misinterpreted, led to experimentation for producing instruments by which the larynx in the living subject could be demonstrated. In the same year in which HORACE GREEN presented a new method of treating laryngitis, BENNATI tried to illuminate the larnyx with artificial light through metal tubes. From this time on, every few years, a new invention was announced purporting to do the work, but not until 1855 was the laryngoscope a pronounced success. In this year GARCIA, a teacher of vocal music in London, demonstrated the larynx. He became quite expert in autolaryngoscopy, and also succeeded in exhibiting the larynx in others. GARCIA'S observations were communicated to the Royal Society of London, but received little attention; however, his experiments were followed up by TÜRCK, who used the throat mirror, upon which daylight was thrown by a reflector, but on account of insufficient light, as autumn advanced, these experiments were abandoned. In the succeeding year, CZERMAK of Pesth borrowed the instruments of TÜRCK and by means of artificial light made the instruments practical at any time. Soon a discussion arose between TÜRCK and CZERMAK as to the priority of their claims in developing this new method of diagnosis. Their letters, which were published in various medical journals, spread a knowledge of the new art, which soon found enthusiastic advocates in this country, among the earliest of which were LOUIS ELSBERG of New York and J. SOLIS COHEN of Philadelphia. From this time on, laryngology received a new impetus, but laryngologic instruction did not receive much attention until about 1865. The first regular instruction given in America was at the medical department of the University of the City of New York in 1861, by Dr. ELSBERG, who established the first public throat clinic in this country in 1863. Ere long other colleges recognized the subject as of sufficient importance for independent instruction. Meanwhile the laryngoscope, and the method of using it, had been improved, its value more fully ascertained, and the art of laryngology had taken many strides in advance. In 1879 the teachers of laryngology in America consisted of five professors in various colleges, four clinic professors, two instructors and eleven lecturers, with four clinic lecturers. The bibliography of America up to this time consisted mainly of articles on croup, papilloma, laryngitis and foreign bodies in the larynx, and the surgery of the tonsils. Among the early contributors to this literature in this country we find such names as MEIGS, WARREN, MOTT, HAMILTON, PANCOAST, BRAINARD, LEIDY, PEPPER, SAYRE, DALTON, PEASLEE, ALLEN, GROSS, FLINT, and others well known to the medical world. Stimulated largely by the writings of TÜRCK, SCHROETTER and MACKENZIE of Europe, SEMELEDER of Mexico, and ELSBERG, COHEN, LINCOLN, LEFFERTS, KNIGHT, and SHURLY in the United States, many medical men were taking up this special work, and in 1878, largely through the efforts of the late FRANK H. DAVIS of Chicago, nineteen were banded together in the formation of the American Laryngological Association, which held its first regular meeting in New York City in 1879. At this meeting eleven other members were added, who by vote of the association were declared among the founders. The association had for its object the consideration of all diseases of the nose and throat and the methods for their prevention or cure. At its twenty annual meetings a large number of valuable papers have been presented, and it is safe

to say that the work of this association has been one of the most important factors in developing this specialty throughout the world. Since the organization of this association, the principal European associations have been formed, and several other societies have been organized in this country. In 1879 only thirty-three men in the United States were giving sufficient attention to laryngology to be considered specialists, but now there are seventy-three in the parent organization.

There are many who interest themselves in the Section of Laryngology, which was added a few years ago to the AMERICAN MEDICAL ASSOCIATION. There are from two to three hundred in the other organizations throughout the States, and the subject has become so popular that the majority of general practitioners have fitted their offices with compressed air and spray tubes, and every town and many cross-roads have their specialists, more or less qualified for the treatment of diseases of the nose and throat. From the more advanced workers in this field, much of great importance to the profession, and through it to humanity, has been learned.

Among the more important papers that mark the development and progress of laryngology and rhinology may be mentioned those upon lupus, by ASCH, DE LASOTA, KNIGHT, JOHNSTON and JARVIS; buccal and lingual tuberculosis, by BOSWORTH, DELAVAN and others; laryngeal tuberculosis, by GLEITZMAN, DELAVAN and MURRAY; paralysis, by ELSBERG and others; laryngectomy, by J. SOLIS COHEN; laryngeal photography, by FRENCH; laryngeal asthma, by GLASGOW; chorea laryngis, by HOLDEN KNIGHT, LEFFERTS and LANGMAID; tension of vocal bands and anatomy of the larynx, by HOOPER and SEILER; tumors of the larynx, by JOHNSON and others; the voice and singer's nodes, by LANGMAID, CURTIS and KNIGHT; spasm of the vocal cords; laryngeal whistling and laryngitis spastica, by MULHALL, ROE and KNIGHT; intubation of the larynx, by O'DWYER; malignant disease of larynx, by DELAVAN and others; leucoplakia buccalis, by the author; deflections and exostosis of the nasal septum, by ROBERTS, DELAVAN, TALBOTT, the author, and others; treatment of goiter, by OHLS and others; hay-fever and reflex phenomena from nasal disease, by DALY, ROE, SAJOUS and ELSBERG; Relation of asthma to catarrh, by DALY and BOSWORTH; diseases of the antrum, by BROWN, DALY and BOSWORTH; atrophic rhinitis, by DELAVAN, RHODES, CASSELBERRY, RICE and many others; hypertrophic rhinitis, by ALLEN, SHURLY, MACKENZIE and JARVIS; retronasal fibroma, by LINCOLN and others; histology of catarrh, by MACKENZIE; membranous rhinitis, by MAJOR; nasal mucous polypi, by KNIGHT and WRIGHT; bacteriology of the nose, by PARK and WRIGHT; ethmoidal affections, by BOSWORTH and MACKENZIE; Ludwig's angina, by NEWCOMB; relations of nasal diseases to disorders of digestion, by ROBINSON, BROWN and FRENCH; relations of catarrhal affections of the upper air-passages to pulmonary tuberculosis, by SOLLY and the author; adenoid vegetations, by ALLEN and many others; tonsillotomy, by LEFFERTS, MACKENZIE, the author and others; rheumatic and gouty sore throat, by the author and RICE; vasomotor neuroses, by MACKENZIE; congenital syphilis of the throat, by MACKENZIE; stricture of the esophagus, by ROE and others; galvanocautery in diseases of throat and nose, by SHURLY and others; pharyngomycosis, by KNIGHT and others. Many other diseases have been carefully studied by American laryngologists, and in spite of the many obstacles presented to physicians in this country, much valuable scientific work has been accomplished in this line.

E. FLETCHER INGALS.

NEUROLOGY AND PSYCHIATRY IN AMERICA.

At the time of the organization of the AMERICAN MEDICAL ASSOCIATION, specialists in medicine were rare, but psychiatry existed and had its special organ. American psychiatry dates from early in the century and had a more than respectable standing even fifty years ago. The first American alienists were strong men in their profession, and the early volumes of the *American Journal of Insanity* are ample evidence of this fact. Such men as RAY, BRIGHAM, GALT, EARLE, and others, were in no way inferior to their confrères in any country, and it should be remembered in this connection that it was the inspiration of American practical work in this line that, through Miss DIX' intervention, brought about reform in the treatment of the insane in Scotland, now the country of model asylums.

Neurology, on the other hand, as a special department of medicine or a specialty by itself, is of much more recent date. It may be indeed said to date back hardly more than thirty-five or forty years, at the utmost. It does not follow from this statement that there was no activity in this direction prior to that date, for such was not the case, but the alienists were the only professed specialists, and observations and publications on neurologic lines were recognized only as contributions to general medicine. There were many such, among them some giving the results of experimental investigation, like the well-known researches of BROWN-SÉQUARD, himself a member of the ASSOCIATION, on the sympathetic system, in 1852. The prize essay of Dr. H. F. CAMPBELL, a former president of the AMERICAN MEDICAL ASSOCIATION, and his claims of priority over MARSHALL HALL, may also be mentioned in this connection, together with many other papers giving observations of more or less interest in nerve pathology. America was not, however, at that time a good country in which to publish facts; it is doubtful whether even BROWN-SÉQUARD, had he continued to publish his researches here, would have attracted the attention which he received from his later European investigations. American works on the practice of medicine, like those of WOOD and FLINT, were sometimes quoted abroad in their statements in regard to nervous disorders, but that was about the extent of European recognition of American neurology.

It was in the closing years of the Civil War that the first thoroughly appreciated American work on a neurologic subject appeared, that of MITCHELL, MOREHOUSE, and KEEN on "Gunshot Wounds of Nerves," afterward elaborated by MITCHELL in his well-known

"Injuries to Nerves, and their Consequences." At this time, too, DEAN had just recently published his elaborate anatomic work on the medulla and trapezium. W. A. HAMMOND, R. T. EDES, BEARD, and the younger SEGUIN were beginning to contribute important articles, and in the early seventies American neurology as a specialty may be said to have been fairly launched. Dr. W. A. HAMMOND'S work on nervous disease, which appeared in 1871 and has run through a number of editions, was a sort of landmark as the first, and for some time the only, American first-class text-book on this class of disorders. It has had many successors of late years of the highest order of merit, but it was the pioneer to gain recognition both here and abroad.

The organization of the American Neurological Association in 1874 was another landmark in the history of neurology in America. Since its inception it has been a stimulus to original work and has well supplemented and supported the work of more local societies. Its influence on American psychiatry, though perhaps not generally acknowledged, has been a salutary one and now, like its sister organization, the American Medico-Psychological Association, it includes in its membership a large number of active workers in both of the allied specialties.

The American contributions to neurology have been in the last two or three decades exceedingly numerous, and among them may be mentioned the works of SPITZKA, BARKER, LANGDON and others on the finer anatomy of the nervous system, the original investigations of DANA, MILLS, OTT, BERKLEY, BROWN, KNAPP, HUN, OSLER, and others on its physiology; of WILDER on its comparative anatomy, nomenclature, etc.; contributions of STARR, DEAVER, ESKRIDGE, PARK, KEEN, and many others, to the surgery of the brain, with many more equally notable, which want of space forbids enumerating. The activity in neurologic research in this country is at present very great, and American work in this specialty stands high throughout the world. In this connection should be mentioned the not strictly medical work that is being published in this line, much of it of the very highest class, in such journals as the *American Journal of Morphology* and the *Journal of Comparative Neurology*, and other scientific publications devoted to biology and kindred subjects. They include a large number of very important researches, many of which have a very direct medical importance and should be included here. The present activity in physiologico-psychologic research has also its neurologic side, but lack of space prevents more than its mere mention.

At the time of the beginning of American neurologic work, some thirty years ago, psychiatry in this country was not at its best, but since then it has likewise advanced, and at the present time it stands higher, both as regards its practical and its scientific aspects, than at any previous period. Though still suffering from the effect of political control of asylums in some parts of the country, the specialty is on a higher plane than at any previous time, and with such auxiliaries as the New York State Laboratory, and a similar, though less endowed arrangement in one or two other States, the prospects of really scientific work in this department were never better.

In the above outline only a few prominent facts have been touched on; more details would have unduly lengthened this notice. Enough has been said, however, to indicate briefly the progress that has been made.

NATHAN SMITH DAVIS.

Dr. N. S. DAVIS modestly made but little reference to himself in his account of the ex-presidents of the ASSOCIATION, and so we take the liberty of making this addendum and of reproducing a steel engraving which represents the "Father of the AMERICAN MEDICAL ASSOCIATION," as he looked fifty years ago.[1]

Dr. NATHAN SMITH DAVIS was born in the township of Greene, N. Y., Jan. 9, 1817. His elementary education was in the common district school of the neighborhood, supplemented by one term in Cazenovia Seminary. He was graduated in medicine from the College of Physicians and Surgeons of the Western District of New York, located in Fairfield, Herkimer Co., N. Y., in January, 1837. After a few months' practice in Vienna, Oneida Co., N. Y., he moved to Binghamton, and was elected delegate to represent the Broome County Medical Society in the Medical Society of the State of New York. It was while attending the annual meeting of the last named society in Albany, in February, 1845, that he offered the resolutions, the adoption of which led to the national medical conventions of 1846 and 1847, and the permanent organization of the AMERICAN MEDICAL ASSOCIATION. Desiring a wider field for professional work, in 1847 he moved to the city of New York, but was induced to remove to Chicago in the autumn of 1849, to fill a professorship in Rush Medical College, and has remained in this city during the intervening fifty years.

Dr. DAVIS' medical work is part of the history of medicine in this country. He is a pioneer in medical education—one of the very earliest to advance the idea of reform—a leading founder of the AMERICAN MEDICAL ASSOCIATION, which in its incipiency was chiefly devoted to this cause, and later, as the founder of the Chicago Medical College, which was the pioneer in the lengthening of the course in medicine, his services have been most valuable.

He has been active in almost everything that relates to the advancement of the profession, and foremost among those who have been honorably represented in these movements. He was secretary-general and later president of the International Medical Congress in 1887; he was one of the founders of the Illinois State Medical Society, Chicago Academy of Sciences, Chicago Historical Society, Illinois State Microscopic Society and the Northwestern University. His contributions to medical literature have been numerous and of value. Among his early works may be mentioned his essay on the "Physiology of the Nervous System," for which, in 1841, he received the prize for the best analysis of the discoveries

[1] The cut found on page 1208 was intended to be used with this article

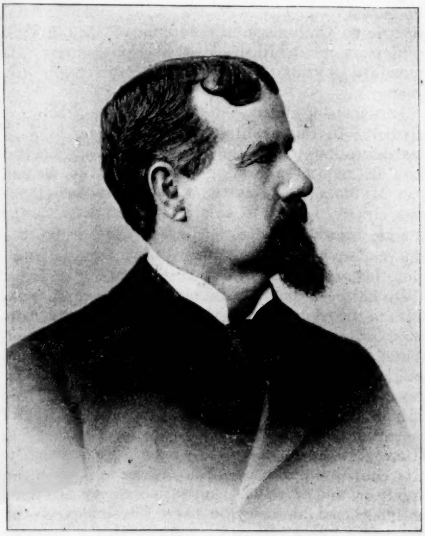
in this department, "History of Medical Education in the United States," published in 1851; "History of the American Medical Association," published in 1855. His published views on the action of alcohol and its uses as a medicine have been of great influence, and some of his data there given are among the permanent acquisitions in regard to this subject. Other published works are "Practice of Medicine," and "Clinical Lectures," which has passed through its third edition. As a medical journalist, he has been in the field almost from the beginning of his career. In New York he was editor of the *Annalist*, and in Chicago took editorial charge of the *Chicago Medical Journal*, and later founded the *Chicago Medical Examiner*. He was also, for the first six years of its existence, editor of the JOURNAL.

His work as a medical teacher began with his connection with the College of Physicians and Surgeons in New York. On his transfer to Chicago he was connected with the faculty of Rush Medical College, and later, as already stated, he organized the Chicago Medical College, of which he is still the honorary head. He is to-day in active practice, keeping his regular hours at his office, and is, considering his advanced age—82—hale and hearty.

There are few living who can show so long, useful and noble a career.

J. M. MATHEWS, PRESIDENT.

Dr. JOSEPH MCDOWELL MATHEWS, who presides at the fiftieth session of the AMERICAN MEDICAL ASSOCIATION, was born in Newcastle, Ky., in 1847. He



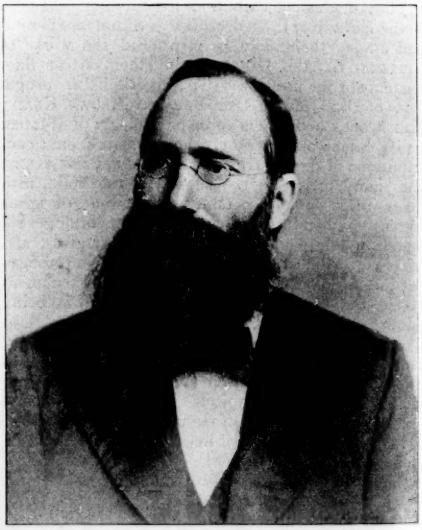
JOSEPH M'DOWELL MATHEWS.

received a common-school education, and was graduated from the medical department of the University of Louisville. In 1878 he removed to Louisville and has for the last thirty years devoted himself to surgery. His work on the "Surgical Diseases of the Rectum and Sigmoid Flexure," published by Appleton and Co., has reached its third edition.

Dr. MATHEWS has been an active member of the AMERICAN MEDICAL ASSOCIATION for the past twenty years, has been first vice-president, and for six years a trustee. He read the general address on surgery in 1887. Among the other official positions now held by him is that of president of the Kentucky State Board of Health, in which capacity he has initiated many important reforms. He is also an ex-president of the Kentucky State Medical Society and the Mississippi Valley Medical Association, and at the present time professor of surgery in the Hospital Medical College, Louisville, and editor of the *Louisville Journal of Surgery and Medicine*. Dr. MATHEWS is an honorary fellow or member of several important medical and scientific societies.

W. B. ATKINSON, PERMANENT SECRETARY.

No man connected with the history of the AMERICAN MEDICAL ASSOCIATION has been in as close touch with it as the permanent secretary, Dr. WM. B. ATKINSON. For thirty-five years he has held the position



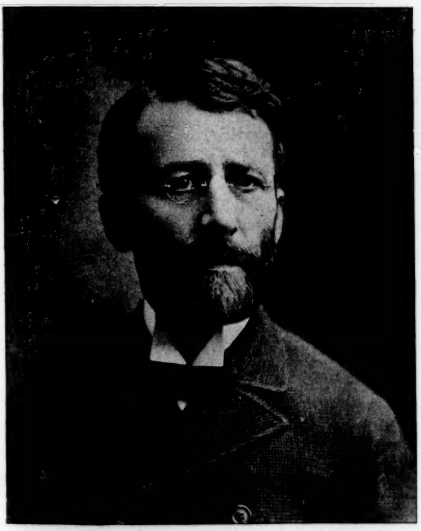
W. B. ATKINSON.

of secretary, and during that time has seen many changes in the ASSOCIATION, and few men have taken a greater interest in its welfare. He was born at Haverford, Pa., June 21, 1832, received his education at the Central High School of Philadelphia, and his medical degree at Jefferson Medical College in 1853. Dr. Atkinson has practiced medicine in Philadelphia since his graduation, was professor of obstetrics in the Pennsylvania Medical College, 1859 to 1861; lecturer

on diseases of children, Jefferson Medical College, 1877 to 1886, and professor of sanitary science and pediatrics in the Medico-Chirurgical College of Philadelphia from 1887 to 1891. He is a member of, and has held office in, various medical societies, and been connected with medical journalism for many years. He served as acting assistant-surgeon in the United States army during the Civil War, and has been medical inspector of the Pennsylvania State Board of Health for many years. He is also the author of several works and many important medical papers. His valuable services to the ASSOCIATION as permanent secretary for so many years need only be mentioned; they are well known to all. He was elected to the position in 1864.

HENRY PARKER NEWMAN, TREASURER.

Dr. HENRY PARKER NEWMAN, the treasurer of the ASSOCIATION, was born in Washington, N. H., in 1853, and graduated from the Detroit Medical College in 1878. He then spent two years in post-graduate work in the leading universities of Germany, and on his return to this country settled in Chicago, where he has since resided and where he has built up a large



HENRY P. NEWMAN.

practice and enjoys the respect of the profession. He is a member of the Chicago Pathological and Illinois State Medical societies, the American Academy of Medicine and the AMERICAN MEDICAL ASSOCIATION. He is a fellow and ex-president of the Chicago Gynecological Society, a member of the American Gynecological Society and one of the founders of the International Congress of Gynecologists and Obstetricians, a corresponding fellow of the Detroit Gynecological Society, and one of the founders of post-graduate medical education in Chicago and the West. He was the first president of one of the leading post-graduate schools and professor of diseases of women, and now occupies the chair of gynecology in the Chicago Policlinic; he has also been actively associated with the College of Physicians and Surgeons, Chicago, since its establishment in 1882, and held the chair of professor of obstetrics and clinical gynecology. He was elected treasurer of the ASSOCIATION in 1894.

ALONZO GARCELON.

One of the most earnest workers in the ASSOCIATION, one who was a member before the majority of those who are now members were born, and who is a representative of the grand "war horses" of the early days of the ASSOCIATION, is Dr. ALONZO GARCELON of Lewiston, Me. The Doctor was born in the town in which he resides, in 1813. While he is now in his eighty-sixth year, he is hale and hearty, attending to his practice and in other ways doing more work than the majority of men in their prime. He obtained his education in the common schools and also at Bowdoin College, was graduated from the Medical College of Ohio in 1839 and at once commenced his life work in his native town, where he is still practicing. An unbroken medical career of sixty years is certainly a record that few can claim. He joined the ASSOCIATION in 1853 and has been an active worker in it through all these years, ever standing up for the best interests of the ASSOCIATION and for the best interests of the profession at large. When the board of trustees was organized to carry out the will of the ASSOCIATION in regard to a journal, Dr. GARCELON was elected on that board, and has been re-elected every time his term expired. He was elected chairman in 1892, and still serves in that capacity. As such he has taken as much interest in the JOURNAL, in its management—financial and otherwise—as though it was his own private enterprise. He has the unusual honor of having been the only Democratic governor that the State of Maine ever had, to which position he was elected in 1878; he has also been president of both the county and his own State medical societies; was surgeon-general of the State of Maine during the Civil War; has been a member of the board of trustees of Bates College since its organization, thirty years ago; was president of the State agricultural society in the early seventies; for seven years president of the Androscoggin Ry. Co., and besides has been counsellor, alderman and mayor of his own town, a representative in the legislature and member of the State senate, and has never asked a man to vote for him or to use his influence in securing the nomination for any office. In other words, Dr. GARCELON, by the record he can show from his own home and State, shows himself to be a man above men, honest, industrious, faithful, patriotic and true in every sense of the word. Such he has always been in his relation to the medical profession. Such he is to-day.

BOARD OF TRUSTEES.

The Board of Trustees is the most important committee of the ASSOCIATION. On it devolves the management of the financial affairs, as well as the management of the JOURNAL. There has always been a tendency to keep in men who have been tried, as thus far only 35 have served on the board, Dr. Garcelon, as indicated above, having served continuously from its organization. The board consists of nine mem-

bers each serving three years. The following have served on the board including the present members:

Alonzo Garcelon since 1882; P. O. Hooper, 1882 to 1892; H. F. Campbell, 1882 to 1887; J. M. Toner, 1882 to 1890; E. M. Moore, 1882 to 1890; L. L. McMurtry, 1882 to 1889, and 1893 to 1894, to fill vacancy; J. H. Packard, 1882 to 1887; Leartus Connor, 1882 to 1894; N. S. Davis, 1882 to 1883, resigned to become editor; J. H. Hollister, 1883 to 1891; E. O. Shakespeare, 1887 to 1890; Wm. T. Briggs, 1887 to 1890; W. W. Potter, 1891 to 1892; I. N. Love, 1889 to 1892, 1895; W. W. Dawson, 1890 to 1893; John B. Hamilton, 1890 to 1893, resigned to become editor; J. V. Shoemaker, 1890 to 1893; D. E. Nelson, 1890 to 1893; John H. Rauch, 1891 to 1894; D. C. Patterson, 1892 to 1894; P. H. Millard, 1892 to 1895; E. Fletcher Ingals, 1893 to 1896; E. E. Montgomery, 1893; John E. Woodbridge, 1894 to 1896; J. W. Graham, 1894 to 1895, to fill vacancy; Joseph Eastman, 1894; James T. Priestley, 1894; J. E. Reeves, 1895 to 1896; D. W. Graham, 1894 to 1897; C. A. L. Reed, 1896; G. C. Savage, 1896 to 1898; Joseph M. Mathews, 1896 to 1898, resigned to assume presidency; Truman W. Miller, 1897; J. T. Happel, 1898; H. L. E. Johnson, 1898.

TREASURERS OF THE ASSOCIATION.

The ASSOCIATION in the fifty-two years of its existence has had but six treasurers. These were: Drs. Isaac Hayes, 1847 to 1852; D. F. Condie, 1852 to 1854; Isaac Wood, 1854 to 1855; Casper Wister, 1855 to 1878; R. J. Dunglison, 1878 to 1894, and the present treasurer.

BRIEF HISTORY OF THE JOURNAL.

The minutes of the ASSOCIATION, and such papers presented at its meetings as survived the censorship of the committee on publication, were formerly printed in a volume of Transactions. The bulk of this volume, the task of editing the papers and the unavoidable mechanic delays in its publication were a constant source of annoyance to the committee and the ASSOCIATION. A resolution introduced by Dr. S. D. Gross of Philadelphia to the effect that the Transactions be published periodically in a journal to be known as the AMERICAN MEDICAL ASSOCIATION JOURNAL, was passed at the meeting in Washington in 1870, but was immediately reconsidered. Nine years later Dr. S. E. Chaille of New Orleans in a paper on "More Efficient Organization of the ASSOCIATION," advocated a change in the method of publishing the Transactions of the ASSOCIATION.

In his presidential address at New York in 1880, Dr. Louis A. Sayre, in discussing the needs of the ASSOCIATION, strongly urged the discontinuance of the annual volume of Transactions, and in accordance with his suggestions, a committee on journalizing the Transactions was appointed, composed of the following: John H. Packard, S. D. Gross, J. S. Weatherby, E. S. Dunster and Walter R. Gillette. The following year this committee made an extensive report on the subject and suggested the appointment of another committee to report in detail a plan for a medical journal. The following were members of that committee: John H. Packard, N. S. Davis, J. S. Billings, L. A. Sayre, R. Beverly Cole, W. B. Atkinson and R. J. Dunglison. This committee, in its report in 1882, estimated the cost of printing the JOURNAL at about $15,000, and as the annual receipts of the ASSOCIATION varied from $2,000 to $6,000, changes in the plan of organization by which the doors of the ASSOCIATION could be opened to all members of State or county societies on application were imperative. The committee recommended the election of a board of trustees, which resulted as follows: To serve three years, N. S. Davis, E. M. Moore and J. M. Toner; two years, H. F. Campbell, J. H. Packard and Leartus Connor; one year, P. O. Hooper, Alonzo Garcelon and L. S. McMurtry. The board immediately assumed its duties and circulated 40,000 prospectuses and pledges of support among the medical profession. At the meeting in Cleveland in 1883, Dr. N. S. Davis, as chairman of the board, reported that 2100 pledges to sustain the JOURNAL had been received, thus assuring its publication. Estimates for printing had been obtained and the bid of a Chicago firm being the lowest, Chicago was recommended as the place of publication. The trustees were authorized to proceed with the publication of the JOURNAL. Dr. Davis was then introduced to the ASSOCIATION as the editor-in-chief. After some remarks on the prospects of the new journal, a vote of thanks was tendered to Dr. Davis for his willingness to assume the burdensome duties.

The original intention was to issue the first number of the JOURNAL, July 1, but owing to the publisher's lack of facilities for the immediate handling of a publication of such size, the first number did not materialize until July 14. It contained in its thirty-two pages a complete transcript of the minutes of the ASSOCIATION, which were thus about ten months ahead of the usual time; a number of scientific articles and a goodly array of medical news, notes and correspondence. Dr. Davis served as editor from 1883 to 1889, when, at his earnest solicitation, his resignation was reluctantly accepted by the board of trustees. Dr. John B. Hamilton, who was elected to succeed him, after serving as editor from January to February, resigned the position on account of other interests. The JOURNAL was then issued by the board of trustees with the advice of Dr. Davis until June 26, when Dr. John H. Hollister of Chicago was elected editor, being succeeded in 1891 by Dr. J. C. Culbertson of Cincinnati, who served until July 1, 1893, when Dr. Hamilton was again elected editor, which position he held until his death, Dec. 24, 1898. The trustees then assumed charge of the JOURNAL, which was placed under the immediate supervision of Dr. Truman W. Miller of Chicago. At the meeting of the board in February, 1899, the present editor was unanimously elected and took charge March 1, 1899.

To recall the various steps in the evolution of the JOURNAL from the time when its publication depended on the tender mercies of the job printer, would require more space than properly belongs to a brief history. Each year has seen some improvement in its columns, and the mechanic facilities have kept pace with its circulation. Under a conservative financial policy, the ASSOCIATION is now the owner of an extensive plant and has a comfortable balance in the treasury. The following is the average circulation of the JOURNAL during the past sixteen years:

1883	3,800	1891	5,200
1884	4,020	1892	5,200
1885	4,500	1893	5,600
1886	4,800	1894	6,200
1887	5,000	1895	6,548
1888	5,100	1896	7,742
1889	5,450	1897	9,119
1890	5,450	1898	11,270

DR. G. FRANK LYDSTON, has returned to and resumed his practice in Chicago, after an extended tour in Central America, Mexico and California.

H. L. E. JOHNSON
E. E. MONTGOMERY
C. A. L. REED
JOSEPH EASTMAN
CHAIRMAN.
ALONZO GARCELON.
J. T. PRIESTLEY
TRUMAN W. MILLER
J. N. LOVE
T. J. HAPPEL
BOARD OF TRUSTEES

ATTENDANCE AT PAST MEETINGS OF THE ASSOCIATION.

The following data are furnished by Dr. W. B. Atkinson, permanent secretary:

At the organization of the ASSOCIATION, the State medical societies were few in number. As far as known there were only those of New York, New Jersey, Connecticut, Massachusetts, New Hampshire, Vermont, Rhode Island, Delaware, Maryland, Virginia (known as the Medical Convention of Virginia), South Carolina, Georgia, Mississippi, Michigan, Ohio (known as the Medical Convention of Ohio), and Tennessee. Since that time new societies have been formed until now every State and Territory has its own. Unfortunately, many of these have been formed on a plan not arranging for membership from the local societies, so that still in many States the profession is not well represented in the AMERICAN MEDICAL ASSOCIATION, by reason of this non-recognition. It is highly desirable that all the State societies should have a uniform rule in this regard, such as will enable many who can not attend the annual meeting of the ASSOCIATION, or of the State societies, to become members by application.

The attendance of the profession at the meetings of the ASSOCIATION has largely depended on the location. Until recently few felt like going to a distance to attend its sessions, hence the attendance was mainly from the immediate neighborhood of the place of meeting. Beginning with the first meeting, there were present in 1847, about 250; in 1848, about 260; in 1849, 475; in 1850, 300; although credentials were received from a representation of 700. The first list of members was issued about this time. In 1851 the attendance was about 250; in 1852, 288; in 1853, 573; in 1854, 260; in 1855, 535; in 1856, over 200; in 1857, 175; in 158, nearly 500; in 1859, 300; in 1860, 535; in 1863, over 200; in 1864, 535, although the Southern States were almost wholly unrepresented; in 1865, 616; in 1866, 367 (annual fee increased to $5); in 1867, 367; in 1868, 324; in 1869, 193; in 1870, 463; in 1871, 200; in 1872, 723; in 1873, 450; in 1874, 420; in 1875, 475; in 1876, 760; in 1877, 663; in 1878, 537; in 1879, 320; in 1880, nearly 1200; in 1881, 475; in 1882, about 1000; in 1883, 900; in 1884, nearly 600—members by application having been provided for. While this did not tend to increase the number registered, yet the list of permanent members began now to markedly increase; in 1885, 650; in 1886, not recorded. The adoption of the rule that permanent members must pay annually caused a temporary decrease, but this has been rapidly made up, so that the roll shows a membership of about 8000, and annually a registration of over 1000. In 1897—the semi-centennial—there were 1970 on the list, and in 1898, 1335.

MEDICAL JOURNALS.

In reviewing the history and progress made in medicine in this country, during the last hundred years, it would be unfair to leave out a description of that which has had much to do with this advancement—medical journals. A century of time is but a moment in the world's history, but when speaking of medical journals it is entirely different. One hundred and two years ago there was not a medical journal in the country, the first being the "New York Medical Repository," a quarterly, which made its appearance in 1797. Drs. E. H. Smith, Edward Miller and Samuel L. Mitchell, all of New York, were the men who have the honor of being the first editors of medical journals in the United States. This journal had a precarious existence, but managed to reach its twenty-third volume.

A few years after this, in 1804, the "Philadelphia Medical Museum" was started, and two months later the "Philadelphia Medical and Physical Journal" made its appearance. In 1810, New York, not to be behind Philadelphia, brought forward the "Medical and Philosophical Register," and the next year Philadelphia again came to the front with the "Eclectic Repository." The following year, 1812, Boston was heard from in the "New England Journal of Medicine and Surgery." This was supported with a good deal of spirit by some of the best practitioners and writers of the region in which it was published, and after an existence of sixteen years was merged into the "Boston Medical and Surgical Journal." The "American Medical Recorder" was the next Philadelphia enterprise and was established in 1818. This journal was finally, in 1829, absorbed by the "American Journal of the Medical Sciences." In 1820 the "Philadelphia Journal of the Medical and Physical Sciences" was established, Dr. Chapman editor. Two years after this the "New York Medical and Physical Journal" was founded and existed about seven years.

The first weekly journal published in the United States was the "Medical Intelligencer," started in 1823 by Dr. J. V. C. Smith of Boston. Probably other medical journals existed during this period, for even at that time there seems to have been an abnormal desire to publish medical journals, as there is to-day, but none of importance have left a record behind them. About this time medical journalism evidently received a new impetus from what was being done in London, by Mr. Wakly, with the "Lancet" It would be interesting to follow on and describe the origin of other medical journals, for about this time these were being established at other, at that time, large cities, such as Cincinnati, St. Louis, etc., but the space required would be more than can be spared.

WEEKLIES.

There are eight weekly medical journals, besides this one, in the United States, at least this is the number of which we are cognizant, and a brief history of these will not be out of place.

Boston Medical and Surgical Journal.—In 1827 the "New England Journal of Medicine and Surgery" and the "Medical Intelligencer," both of which have been mentioned above, were consolidated and called the "Boston Medical and Surgical Journal." This may therefore claim to be the oldest medical journal in the country, if we are to date its existence from the date of the issue of the first of the two journals which it succeeded. It is interesting at this time to read the reference made to this journal in the report of the committee on medical literature, which was made at the first meeting of the AMERICAN MEDICAL ASSOCIATION. The report says: "Its contents have been more various than those of any of its contemporaries and its pages have been used by anonymous writers with a freedom which recalls the early days of the 'Lancet.' For this, or other reasons, much of the medical literature of the 'Boston' and its natural tributaries has been diverted into other and distant channels." Evidently the "Boston Medical and Surgical Journal" was trying to follow in the footsteps of

Mr. Wakly of the "Lancet," at that time. The "Journal" is recognized as one of the solid, substantial weeklies of the country, conservative, and of a high order of merit. Its present editor is Dr. George B. Shattuck.

Cincinnati Lancet-Clinic.—This is another weekly which claims connection with the past. It succeeded the "Western Lancet" and the "Clinic." The "Western Lancet" was founded in 1842 and was consolidated with the "Observer" January, 1858, and then became known as the "Cincinnati Lancet and Observer." The "Observer" was founded in 1856. The "Clinic" was a weekly and was founded in August, 1871, and ran as the "Clinic" till January, 1878, under the editorship of Drs. J. T. Whittaker, W. W. Dawson and P. S. Conner. The "Western Lancet," it is claimed, was a continuation of the "Western Quarterly Reporter," which was established in 1822. This was succeeded by the "Medical Repository," founded in 1826, and it by the "Journal of Medical and Physical Sciences," which appeared from 1828 to July, 1838, to be taken up later, as stated above, by the "Western Lancet." Following this history back, therefore, to the "Western Quarterly Reporter," the "Cincinnati Lancet-Clinic" can justly claim to be the third oldest journal in the United States. It was purchased by the present proprietor in 1874, when it was known as the "Lancet and Observer." The "Clinic" consolidated with the "Lancet and Observer" in 1878, since which time it has been known as the "Cincinnati Lancet Clinic." Dr. Culbertson has been the continuous proprietor since Jan. 1, 1874, and has been editor during that time, except the interval from May, 1891, to July, 1893, during which time he was editor of the JOURNAL.

Medical News.— This New York publication of Lea Bros. & Co. has always been a clean, progressive, at the same time conservative, scientific journal, and has deservedly had the confidence and esteem of the profession all through its career. It was started as a monthly in 1843, and as such was successful. It was changed to a weekly in 1882. Published originally in Philadelphia, it was a few years ago removed to New York. It present editor is Dr. J. Riddle Goffe.

New York Medical Journal.—This weekly was started in April, 1865, as a monthly, with Dr. William A. Hammond as editor. In 1867 the late Dr. E. S. Dunster was associated with Dr. Hammond, and in 1869 Dr. Dunster became editor-in-chief. In 1871 the late Drs. William T. Lusk and James B. Hunter assumed the editorial management, and in 1874 Dr. Lusk retired, leaving Dr. Hunter as editor, in which position he continued until 1880, when Dr. Frank P. Foster succeeded him. In January, 1883, the "Journal" was changed from a monthly to a weekly, with Dr. Foster as editor. During the period from 1865 to 1868 it underwent a change of publishers three times, D. Appleton and Company having become the publishers in the last-named year—1868. In 1898 Dr. Kenneth W. Millican was associated as assistant editor with Dr. Foster, and so remains at the present time. The "Journal" has always been ably edited, and recognized as one of the leading medical weeklies.

Medical Record.—This, one of the most influential medical journals in the country, was first issued on March 1, 1866. Previous to that time there had been several attempts made in New York to publish a medical journal at less frequent intervals than monthly, all of which had successively gone under. The idea of starting the "Medical Record" originated with Mr. William H. S. Wood, then a young man just out of college. His father, the late Mr. William Wood, at that time the head of the firm, was warned that such an enterprise would only result in failure. His son, however, felt that a journal properly edited and managed from the business end would succeed. The "Medical Times," published by Bailliere Brothers and edited by Dr. Stephen Smith, had but recently succumbed to adverse circumstances, and with Dr. George F. Shrady, Dr. Stephen Smith's assistant, an arrangement was made to assume charge of the "Medical Record." It was first published as a semimonthly of twenty-six pages, the general appearance differing greatly from its present form and style. Its semimonthly issue was continued with a gradual increase in the number of pages until 1875, when it was changed to a weekly. Dr. George F. Shrady has been its editor all through its history, and he is to be congratulated on the good work he has done.

Maryland Medical Journal.—This Baltimore journal was established in 1877, being issued first as a monthly and afterward changing to a weekly. While it is small in size and makes no pretentions to being a journal of national character, it is of considerable influence in the part of the country in which it is published.

Medical Review, St. Louis.—The "Review" was started as a semimonthly in Chicago, Jan. 5, 1880. It was first called the "Chicago Medical Gazette," but after running under that title for six months it was changed to the "Chicago Medical Review." Dr. E. C. Dudley of Chicago was editor. In 1881 it was sold to Chandler and Englehard, and soon after Dr. Dudley bought it and finally sold it to J. H. Chambers of St. Louis in the early part of 1883. Since that time the "Review" has had various publishers and many editors, and has not been as successful for these reasons as it ought to have been. It has been published at $3, but now under the new proprietors and editors it has been reduced to $1 per year, the only weekly journal published at so low a price. Drs. Hanau W. Loeb of St. Louis and Harold N. Moyer of Chicago have recently assumed editorial charge, and it is already showing marked improvement.

Philadelphia Medical Journal.—The last weekly to be mentioned, for the reason that it is the last to make its appearance, is the "Philadelphia Medical Journal," established January, 1898. Backed morally and financially by the best men in the profession in Philadelphia, and edited by one of the best-known medical writers of the day, its success was assured even before its first number was issued and before its actual excellence could be seen. It has proven to be a success, for it has built up a circulation in a year and a half equal to that of a majority of the old established weeklies. The excellent character of this journal, the highly ethic standard it has assumed, the low price at which it is published, the fact that its owners are medical men and that it is published in the interest of the profession, and not as a business venture, makes it deserving of all the success it is having.

An effort has been made, at least once, to publish a daily medical journal but without success. One, the "N. Y. Daily Lancet," made a struggle at various prices, finally coming down to the absurd price of $1 a year and then gave up.

MONTHLIES.

American Journal of the Medical Sciences.—This

Philadelphia journal holds the most enviable record of all American medical journals. While it was founded in 1827 under its present name, it might date its existence from 1820, or even two years earlier, for it absorbed, in 1829, the "American Medical Recorder," established in 1818, and also succeeded the "Philadelphia Journal of the Medical and Physical Sciences," which has been referred to above, and which was established in 1820. It is probably the oldest medical journal in the country, or in the world for that matter, unless the "Boston Medical and Surgical Journal" runs back to the "New England Journal of Medicine and Surgery." (Under their present names the "American Journal of the Medical Sciences" was founded in 1827 and the "Boston Medical and Surgical Journal" in 1828.) Its career is remarkable in that all through its existence it has been recognized as reflecting the best thought in medicine and surgery, having always received the support of the best writers in the profession. Again referring to the report made by the committee on medical literature at the first meeting of the ASSOCIATION, this journal was alluded to in the following words: "So much of what is valuable in our periodical literature, during the long protracted period of its existence, has found a place in its pages, that it would be going beyond the limits of this report to attempt an analysis of its contents. Here have been recorded many of those daring operations which are dwelt on with so much pride by the American surgeon. Numberless cases of unusual interest have been here related by their observers, often accompanied by illustrations, for the most part creditable to the art which has furnished them. Many of the reviews which it contains are conceived and executed in a higher spirit than the mere mechanic analyses and Taliacotian abstracts which so frequently usurp this department of scientific as well as literary journals. This periodical is so well known through the country, and a complete series of it so generally contained in public libraries, that a general index to it from the commencement would be one of the most acceptable offerings which could be made to the medical reader." This eulogy, written fifty years ago, is still due this excellent journal, which was published quarterly until 1888, when it was changed to a monthly. It is at present edited by Dr. Alfred Stengel, with the co-operation in London of Hector McKenzie.

New Orleans Medical and Surgical Journal.—This is another of the old stand-bys, established in 1844, and has been regularly issued since, except for a brief period during the Civil War. It has always had the support of the best writers of the profession in the south. It is at present edited by Drs. Charles Chassaignac and Isadore Dyer.

Buffalo Medical Journal.—This monthly had its birth the year following that of the "New Orleans Medical and Surgical Journal," 1845. It was founded by the first Austin Flint, and for many years was among the leading journals of the country. After some years of prosperity the editorial became separated from the business management and the latter became so unprofessional that in May, 1860, it had to suspend from lack of professional support. In a little more than a year afterward—August, 1861—it was started under a slightly modified name, and has since been so conducted that it has continually had the support and respect of the profession. It is now edited by Drs. Thos. Lathrop and Wm. Warren Potter.

American Journal of Obstetrics.—Originally started in May, 1868, under the editorial management of Dr. Benjamin F. Dawson, who was also the owner of the "Journal," this publication was continued by him as a quarterly until 1872, when, finding the business management a care which he did not feel disposed longer to continue, he offered it to its present publishers. Messrs. William Wood & Company, who purchased it on Jan. 1, 1873, at which time its publication was changed to a monthly, in which form it has been continued until the present time. Dr. Dawson continued to edit the "Journal" for a time, when ill health compelled him to resign the position and Dr. Paul F. Mundé assumed it. After a number of years Dr. Brooks H. Wells became the active editor, which position he still holds.

Annals of Surgery.—The "Annals" is one of the strong scientific and high-standard medical journals of the day. It is devoted entirely to surgery and is endorsed and supported by the best surgeons of the country. It was established by James H. Chambers of St. Louis in January, 1885, under the editorship of Dr. L. S. Pilcher of New York and Mr. C. B. Keetley of London. It was the successor to and the outgrowth of "The Annals of the Anatomical and Surgical Society of Brooklyn," 1879–1880, and of the "Annals of Anatomy and Surgery," 1881–1883. In January, 1892, the University of Pennsylvania Press became the proprietors of the periodical, and continued its publication until June, 1897, when it was transferred to the J. B. Lippincott Company, its present publishers. Throughout its history the chief editorial management has been conducted by Dr. L. S. Pilcher. Mr. Keetley remained as an associate editor until 1892, when he was succeeded by Dr. J. W. White, Dr. William Macewen and Mr. Frederick Treves, who still remain associated, except in the case of Mr. Treves, whose place was taken by Mr. Jacobson in 1896. The "Annals" is the exponent of the best there is in America, and is recognized as being one of the best journals in the country devoted to surgery.

There are other medical journals which deserve notice here, such as the "American Gynecological and Obstetrical Journal," owned and edited by Dr. J. D. Emmett, which has a national reputation among obstetricians and gynecologists; "Medicine," a clean, high-class and well edited journal; and others, which might be mentioned were it not that space is limited.

It is interesting at this time to read the report of the committee on medical literature, already referred to, which was made at the first meeting of the ASSOCIATION. The chairman of this committee was Oliver Wendell Holmes, the others of the committee being Enoch Hale, G. C. Shattuck, Jr., Daniel Drake, John Bell, Austin Flint and W. Seldon. This report says: "In the course of half a century from the establishment of the first of the medical journals, their number has been gradually rising, until at the present time at least twenty are known to be in existence. Some principle, in addition to the wants of the reading community, must exist to account for such inordinate fecundity in this particular department. This is to be found in the homely fact that a medical journal is a convenient ally and advertising medium for public institutions and publishing establishments, and that by the 'help yourself' system so generally established, it is not necessarily much harder to edit a medical journal than to furnish the 'notes and additions' to

the work of a British author." What, indeed, would this committee have to say if they were making a report to the ASSOCIATION now, fifty years after, when, instead of there being twenty medical journals, there are 230?

Quoting farther on from this report, it says: "A sore cause of complaint, of occasional but not frequent occurrence, is to be found in the liberties allowed to anonymous writers not so much with regard to each other—for if 'Medicus' and 'Senex' were to succeed in reciprocal annihilation, the loss might not be serious—but with regard to their neighbors at large and to things in general. An editor is responsible that nothing shall be admitted into his pages the essential character of which is hostile and inflammatory, on the same principle that he is bound to be courteous in his common intercourse. Some errors of this kind are doubtless owing to want of careful supervision on the part of the editor. That such negligence is very general there can be no dispute; there is hardly one of the journals whose fair features are not marked with the acne of typographic inaccuracies—and as the editors are educated men, the inference is inevitable that they have not read their own pages."

With this report was given a list of all the medical journals in the country at that time. There are eighteen in the list, although the report speaks of there being twenty. Only five of those are in existence to-day.

As a comparison, we had prepared for publication a list of the medical journals now in existence, but lack of space compels its omission. It gives the information that there are now about 180 regular medical journals, and between 40 and 50 homeopathic, eclectic and nondescript.

MEDICAL COLLEGES.

Medical education was at a low ebb in the early days of our Colonial period, for: 1, the necessary time, incident to the beginning of any country's history, before medical schools could be established; and 2, the fact that most medical men in the earliest of the Colonial days were mediocre at the best. But New York in 1760, and New Jersey in 1772, passed measures for restricting medical practice by requiring an examination "in physick and surgery," while in 1752, in Philadelphia, the first permanent hospital was established, at the suggestion of Dr. Thomas Bond, "who became its superintendent, and we believe the first regular *clinical* lecturer on medicine in America."[1] Also in Philadelphia, but in 1762, Shippen gave a course of lectures on anatomy to a class of twelve. "He continued the same course during the two following years, and in 1765 was joined by John Morgan, M.D. . . . Dr. Morgan soon delivered a public discourse on 'The Institution of Medical Schools in America,' before the trustees of the university that had been established in Philadelphia, and proposed a plan for teaching the various branches of medical science."[2] The result was his appointment to the professorship of theory and practice of medicine, Dr. Shippen to the chair of anatomy and surgery, and later, 1768, Dr. Kuhn to the professorship of botany and materia medica, with, a year later, Dr. Benjamin Rush as professor of chemistry. Thus was started the first institution for the teaching of medicine—the Medical School of the College of Philadelphia, begun in 1765, closed on June 1, 1777, on account of the occupation of the city by the British army, but reopened in 1778, to later become the medical department of the University of Pennsylvania.

In 1768, an effort was made in New York to establish a medical school in connection with Kings College, but with only moderate success, for in 1774 but about twenty-five attended the anatomic lectures.

Again we see the establishment of courses of lectures in different medical subjects, in connection with Cambridge University, in 1782, and in 1788 a medical faculty was established.

By 1810 the students attending medical colleges in this country numbered 650, with 100 graduates; in 1820, 964 students and 182 graduates; in 1830, 2125, and in 1840, 2800 students, against 597 and 775 graduates respectively.[3]

This glimpse through the past shows how and where medical colleges began in this country, their early history, often ups and downs, with the establishment of later medical institutions in the late eighteenth and early nineteenth century. Lack of space precludes any further detail. But the *bacillus scientiæ medici* multiplied rapidly, and schools of medicine were established in many places throughout the thirteen States, with later, almost annual, now even more frequent than annual, inoculations, until to-day the original pure culture, as in other bacteriologic fields has too often become a mixed, or a totally contaminated culture, from which we have to eliminate the more rapidly developing, in certain fields, *bacillos molinarum diplomarum* by means of that efficient germicide—a specific for this bacillus—State regulation.

Passing over these early years, to 1847, the convention which resulted in the organization of the AMERICAN MEDICAL ASSOCIATION saw twenty-eight medical colleges from twenty-two States there represented by delegates, and twenty-three of these colleges are in existence to-day.

In 1850 the number of students in attendance at medical colleges was 4500, with a roster of graduates containing 1300 names. At the present writing the medical students enrolled approximate 20,000, while some 3500 have received degrees at the various commencements just passed.

We had hoped to present here the number of graduates in medicine in this country for each year since the organization of the ASSOCIATION, but the data from a few medical institutions has not been obtainable in the short time at our disposal, though the approximate number of both graduates and students of medicine to-day, as concerns the regular medical schools in the United States, is, as given herein, as nearly correct as it is possible to make it.

When the ASSOCIATION was organized, the requirement for a medical degree was, practically, attendance varying from one session of nine months to two sessions. Ten years later saw but little increase in the time requirements in the curriculum, for that matter, and another decade shows much the same conditions existing. In fact, the higher standard now required is an outcome of the last few years, though the last two decades have evidenced a gradual tendency to lengthen or make more uniform the length of the sessions, the number of the sessions required for a degree, and the curricula of the various medical institutions. Especially is the change noticeable in

[1] Davis, N. S.: History of Medicine in United States. [2] Ibid, p. 24. [3] Ibid, p. 114.

the latter, for from the simplest requirements in the early days, the curricula have greatly been increased until now, from the high standards demanded of the candidate, the degree of M.D. has from most of our institutions come to carry great precedence. To be sure there is still room for even more elevation in the standard of requirements for graduation, and but few medical schools even now demand a university degree or its equivalent before beginning the study of medicine, but the trend is in that direction, and in not a few years will all medical schools make this demand, but also those of short courses will no longer be significant factors in medical education. We present the following table, replete with interesting facts, but which is far from complete. We publish it for the reason that we desire to make it a basis for future use. It seems absurd that it is impossible to get correct statistics in regard to medical colleges, but such seems to be a fact. Letters and circulars have been sent to every regular medical college in the United States, in many cases no reply being received to a second and third letter. We would earnestly request those colleges not here mentioned to send us the statistics for which our circular-letter called; also corrections for the list here published. Space precludes going into the statistics and work of the many excellent post-graduate institutions of the country.

NAME OF COLLEGE.	Date of organization.	Years study required at time of organization.	Years study now required.	When changes occurred.
Department of Medicine, University of Pa.	1765	1	4	
Harvard Medical College	1782		4	
Medical College of Georgia	1800	3	3	
College of Physicians and Surgeons, Medical Department of Columbia University in City of New York	1807		4	
University of Maryland, School of Medicine	1807		4	
Yale University, Department of Medicine	1810		4	1879-96
Medical College of Ohio	1819		4	
Medical School of Maine	1820		3	
Medical Department of the Columbia Univ.	1822		4	
Medical Department, University of Vermont	1825		4	
Jefferson Medical College of Philadelphia	1825	2	4	
Medical College of State of South Carolina	1828	1	4	
Medical Department, Tulane University of Louisiana	1834		4	1899
Albany Medical College	1838		4	
University of Louisville, Medical Department	1837		4	
Rush Medical College	1837		4	1850-89-93-99
Medical College of Virginia	1838		4	1894-99
Missouri Medical College	1840		4	
St. Louis Medical College, Medical Department of Washington University	1842		4	1882-1899
Medical College of Western Reserve Univ.	1843		4	1887-92-96
University of Buffalo, Medical Department	1845		4	
Starling Medical College	1847		4	
College of Physicians and Surgeons (see Keokuk Medical College)	1849		4	
Woman's Medical College of Pennsylvania	1850		4	
Kentucky School of Medicine	1850		4	
School of Medicine, Georgetown University	1851		4	
Cincinnati College of Medicine and Surgery	1851		4	
Miami Medical College	1852		4	
Cooper Medical College	1858		4	
Long Island College Hospital	1858		4	
Northwestern University Medical School	1859		4	1868-1892
Medical College of Alabama	1859		4	
Woman's Medical College of the New York Infirmary for Women and Children	1864		4	1877
Cleveland College of Physicians and Surgeons	1863		4	
Medical Department of Willamette Univ.	1865		4	
Medical Department of Howard University	1867		4	
Medico-Chirurgical College	1867		4	1899
Kansas City Medical College	1869		4	
Medical College of Indiana	1869		4	
Medical Department University of Iowa	1869		4	
Northwestern University Woman's Medical School	1870	3	4	1899
College of Physicians and Surgeons of Baltimore	1873		4	
College of Medicine of Syracuse University	1872	2	4	1875
Medical Department, University of the State of Missouri	1873	2	4	
Medical Department, University of the State of California	1873		4	
Medical Department Vanderbilt University	1875		4	1893-99
Medical Department University of Tennessee	1876		4	
Meharry Medical Department Central Tennessee College	1876	2	4	
Memphis Hospital Medical College	1878	2	4	
Central College of Physicians and Surgeons	1879	1	4	
Arkansas Industrial University, Med. Dept.	1879	2	4	1895
Fort Wayne College of Medicine	1879	2	4	
St. Louis College of Physicians and Surgeons	1879	2	4	1-98
College of Physicians and Surgeons (Boston)	1880	3	4	1884-93-95
Baltimore Medical College	1881	2	4	
Medical Department, University of Denver	1881	2	4	
Toledo Medical College	1881	2	4	
University Medical College	1881	3	4	
University Medical College (Kansas City)	1881	2	4	
Omaha Medical College	1882	2	4	1890-95
Woman's Medical College of Baltimore	1882	3	4	
College of Physicians and Surgeons (Chicago)	1882	2	4	1889-94
Iowa College of Physicians and Surgeons	1882	2	4	
Western Pennsylvania Medical College (Med. Dept. of Western Univ. of Pa.)	1883	2	4	
Colorado School of Medicine	1883	3	4	
Minneapolis College of Physicians and Surgeons, Medical Department of Hamline University	1883	3	4	1896
Medical Department Univ. of S. California	1884	3	4	1894
Baltimore University School of Medicine	1884	2	4	1897
Detroit College of Medicine	1885	2	4	
Medical Department University of Oregon	1887	3	4	
Gross Medical College	1887	3	4	
Ensworth Medical College and Hospital	1888	3	4	1898
College of Medicine and Surgery, University of Minnesota	1888	3	4	
Michigan College of Medicine and Surgery	1888	3	4	
Medical College New Orleans University	1889	3	4	1895
Chattanooga Medical College (Medical Department Grant University)	1889	3	3	
Kansas Medical College	1889	3	3	
Medical Branch, University of Texas	1890	3	4	
Ohio Medical University	1890	3	4	1897
Marion-Sims College of Medicine	1890	2	4	
Laura Memorial Woman's Medical College	1890	3	4	
Keokuk Medical College	1890	2	4	
Harvey Medical College	1891	4	4	
Creighton Medical College	1892	3	4	
Barnes Medical College	1892	3	4	
Medical Department of Johns Hopkins Univ.	1893	4	4	
Tufts' College Medical School	1893	3	4	
University College of Medicine	1893	3	4	
Wisconsin College of Physicians and Surgeons	1893	3	4	1897
Jenner Medical College	1894	3	4	
Milwaukee Medical College	1894	3	4	
Illinois Medical College, The Chicago Summer School of Medicine	1894	3	4	
College of Physicians and Surgeons, Medical Department Kansas City University	1894	3	3	
Birmingham Medical College	1894	3	4	
College of Physicians and Surgeons of San Francisco	1896	4	4	
Medico-Chirurgical College (Succeeded Kansas College of Medicine and Surgery)	1897	3	4	
Atlanta College of Physicians and Surgeons	1898	3	3	
Keokuk Medical College; *a*, College of Physicians and Surgeons, 1849; *b*, Keokuk Medical College, 1890	1899	2	4	Succeeded.

SECRETARIES OF THE AMERICAN MEDICAL ASSOCIATION.

The secretaries of the ASSOCIATION have been as follows: At the convention in 1846, prior to organization, Dr. W. P. BUEL was selected to act as secretary, and at the nomination of officers, Dr. ALFRED STILLÉ and Dr. RICHARD D. ARNOLD were appointed. These gentlemen acted during that session of the convention and at the first regular meeting of the ASSOCIATION. In 1847, Dr. STILLE and Dr. J. R. W. DUNBAR were elected. In 1848, Dr. STILLE and Dr. HENRY I. BOWDITCH acted; also in 1849. In 1850, Dr. STILLE and Dr. DESAUSSURE were secretaries, and in 1851, Dr. DESAUSSURE and Dr. P. C. GOOCH. In 1852, Dr. E. L. BEADLE served with Dr. DESAUSSURE; in 1853, Dr. E. S. LEMOINE with Dr. BEADLE; in 1854, Dr. FRANCIS WEST with Dr. LEMOINE; in 1855, Dr. WM. BRODIE and Dr. WEST; in 1856, Dr. R. C. FOSTER and Dr. BRODIE; in 1857, Dr. A. J. SEMMES with Dr. FOSTER; in 1858, Dr. S. M. BEMISS with Dr. SEMMES; in 1859, Dr. ELI IVES with Dr. BEMISS; in 1860, Dr. S. G. HUBBARD with Dr. H. A. JOHNSON; in 1863, Dr. GUIDO FURMAN with Dr. JOHNSON. In 1864 the amendment to the constitution was made, creating the office of permanent secretary, and Dr. WILLIAM B. ATKINSON was elected to that office, which he still fills.

Current Medical Literature.

Titles marked with an asterisk (*) are noted below.

American Journal of Medical Sciences, May.

1.—*Study of Leucocytosis Associated with Convulsions. Fred Grant Burrows.
2.—*Case of Brain Tumor at the Base of the Second Left Frontal Convolution. Hermon C. Gordinier.
3.— Sarcoma of Testicle. Geo. M. Kober.
4.—*Detachment of Retina. Mathias Lanckton Foster.
5.—*Should the United States Pharmacopeia Recognize Veratrum Album and Veratrum Viride as one Drug? Horatio C. Wood and Horatio C. Wood, Jr.
6.—*Critic Summary of the Question of Fatty Degeneration. Alonzo Englebert Taylor.
7.—*Some Recent Literature Regarding Cancer. Charles H. Frazier.

American Gynecological and Obstetrical Journal (N. Y.), May.

8.—*Consideration of Vaginal Fixation in Treatment of Retroversion. E. E. Montgomery.
9.—*Alexander's Operation. Charles P. Noble.
10.—*Suspensio Uteri and Intraperitoneal Shortening of Round Ligaments. Richard C. Norris.
11.—*Non-operative Treatment of Retrodisplacements of Uterus. F. Hurst Maier.
12.—*Causation of Uterine Retrodisplacements. Wilmer Krusen.
13.—*Diagnosis of Retrodisplacements of Uterus. John M. Fischer.
14.—*Presentation of New Ecraseur; its Advantages over Ligatures and Clamps in Intrapelvic Surgery. J. Dougal Bissell.
15.— Imperforate Anus, with Report of Cases. V. A. Robertson.
16.—*Early Diagnosis of Cancer of Pelvic Organs. C. C. Frederick.
17.—*Management of Labor Cases in Private Practice. Allen M. Thomas.

Journal of Nervous and Mental Diseases (N. Y.), May.

18.—*Retrobulbar Neuritis and Facial Palsy Occurring in Same Patient, with Cases. G. E. de Schweinitz.
19.—*Relations of Infantile Spinal Paralysis to Diseases of Later Life. William Hirsch.
20.—*Lipoma of Filum Terminale. William G. Spiller.
21.—*Do Epileptics Recover? Edgar J. Spratling.

Journal of Boston Society of Medical Sciences, April.

22.—*Weak Feet. Benjamin Tenney.
23.—*Miliary Aneurysm of Brain. E. W. Taylor.
24.— Some Physiologic Effects of Reduced Pressure on Fish. Frederic P. Gorham.
25.—*Disproof of Paraxanthin Poisoning Theory. J. J. Putnam and Franz Pfaff.

Western Medical Review (Lincoln, Neb.), May 15.

26.—*Empyema and its Treatment. Emory Lanphear.
27.—*Wounded from Santiago. Lewis Schooler.
28.—*Tuberculosis of Larynx. F. E. Sampson.
29.—*Gastro-Enterostomy: Indications and Report of Cases. Byron B. Davis.
30.— Appendicitis or Salpingitis with Complications, and Reports of Some Unusual Cases. Thomas H. Hawkins.
31.—*Criticism of Whitehead's Operation for Piles. S. G. Gant.

Am. Practitioner and News (Louisville) May 1.

32.—*Dislocation of Cervical Vertebræ Followed by Mania and Death. Report of Case. Thos. L. Butler.
33.— Case of Extrauterine Pregnancy; Operation; Recovery. Lewis S. McMurtry.

Denver Medical Times, May.

34.— Recreation for Invalids. E. A. Lee.
35.— Seeking Health in Colorado. Luther H. Wood.
36.—*Observations on the Effects of Great Altitudes. E. A. Whitmore.
37.— Endometritis. Lewis S. McMurtry.
38.— Nauheim Treatment in Myocardial Disease. Allan A. Jones.
39.— Hematuria During Six Months of Gestation and Two and One-half Weeks After: Report of Case. P. D. Rothwell.
40.—*How to Effect Expulsion of the Placenta after Childbirth. R. G. Woodworth.

International Medical Magazine (Phila.), May.

41.— Hypnotism and its Use in Medicine. F. X. Dercum.
42.—*Treatment of Chronic Diseases of Kidneys. Carl Von Noorden.
43.—*Gall-stones. Joseph McFarland.
44.—*Some Practical Uses for Electrolysis. W. Blair Stewart.
45.— Treatment of Gonorrhea in Women. J. D. Thomas.
46.— Treatment of Chronic Endometritis. E. E. Montgomery.
47.— Test-meals and Best Way to Obtain Gastric Contents after Them. Boardman Reed.
48.— Chronic Diseases of the Colon, and Some General Disturbances Caused Thereby. A. G. Deardorff.

Post-Graduate (N. Y.), May.

49.—*Syphilitic Affections of Heart and Lungs. Leonard Weber.
50.— Recollections and Reflections of a Quarter of a Century. Stephen Smith Burt.
51.—*Two Months in Medical Wards of N. Y. Post-Graduate Hospital. William Henry Porter.

Medical Bulletin (Phila.), May.

52.— Psoriasis: Verruca: Herpes Zoster. John V. Shoemaker.
53.—*Faulty Diagnosis from Faulty Examinations of Urine. Theo. W. Schaefer.
54.—*Treatment of Varicose Ulcers. Philippe Valençon.
55.—*Regarding Percentum Solutions. C. H. Gubbins.

Corpuscle (Chicago), June.

56.—*"Christian Science" Viewed from a Medical Standpoint. Bertram W. Sippy.
57.—*Acute Melancholia and Mania. D. R. Brower.

Merck's Archives (N. Y.), May.

58.—*Therapeutic Value of Paraldehyde. J. V. Shoemaker.
59.—*Two Interesting Cases with Hints as to their Treatment. W. H. Porter.
60.—*Carbolic Acid in Tetanus. Horatio C. Wood, Jr.
61.—*Therapeutics of Acute Pneumonia. Thomas J. Mays.
62.—*Some Uses of Strychnin. J. H. Jackson.
63.—*Some Considerations on Etiology and Treatment of Rheumatism. A. A. Eshner.
64.—*Trional. H. P. Coile.

Medical Sentinel (Portland, Ore.), May.

65.—*Lumbago and Simulated Conditions. R. L. Gillespie.
66.—*Early Diagnosis of Pulmonary Tuberculosis. A. E. MacKay.
67.—*Infant Feeding: Natural and Artificial. Alva D. Walker.
68.—*Appendicitis (continued). L. P. McCalla.
69.—*Cold as Factor in Production of Scurvy. A. W. Botkin.
70.— Proper Operation for Cancer of Rectum. Jos. M. Mathews.

Kansas City Medical Record, May.

71.—*Treatment of Pulmonary Tuberculosis. R. O. Cross.
72.—*Why a Conscientious Physician Can Not Practice Homeopathy. J. K. Cole.
73.— Let the Term "Amputation" Be Abolished Altogether in all Traumatisms Involving Extremities or their Appendages. Thomas H. Manley.

Atlanta Journal-Record of Medicine, May.

74.— Memorial Address on the Late Dr. Henry Campbell Doughty. Joseph Eve Allen.

North Carolina Medical Journal, May 5.

75.—*An Unusual Case. M. R. Adams.
76.—*Care of Sick and Wounded in War of Revolution. Francis R. Packard.

Virginia Medical Semi-Monthly (Richmond), May 12.

77.—*Dangerous Possibilities of Pus in Female Pelvis as Result of Appendicitis. John B. Deaver.
78.—*Penetrating Wounds of Abdomen, with Report of Cases. Floyd W. McRae.
79.— Nasal Disease as a Causative Factor of Disease in Eye. O. A. M. McKimmie.
80.— How Curative Agents Act. H. A. Minor.
81.—*Erythema Scarlatinoides: a Case. J. Travis Taylor.
82.— Detention and Commitment of Insane in District of Columbia. Clifton Mayfield.

Boston Medical and Surgical Journal, May 25.

83.—*Value of Posture in Treatment of Occipito-Posterior Positions. Charles M. Green.
84.—*Case of Perforation in Typhoid Fever Closed by Adherent Tag of Omentum, Followed by Relapse, Second Perforation and Death. D. J. Milton Miller.

Medical Record (N. Y.), May 27.

85.—*Mosquitoes Considered as Transmitters of Yellow Fever and Malaria Charles J. Finlay.
86.—*Failure of Antitoxin in Treatment of Diphtheria. J. Edward Herman.
87.—*New Operation for Epithelioma of the Lip. W. W. Grant.
88.— Epistaxis: its Cause and Treatment. Carl Seiler.
89.—*Some Clinic Features about Vaccination. Lucien Lofton.
90.— Recurrent Strangulation of a Left Oblique Congenital Enteroepiplocele in Infant Six Weeks old; Herniotomy; Recovery. Herbert Marion Stowe.
91.— Unusual Case of Sinus Thrombosis and Epidural Abscess Complicated by Malaria; Operation; Recovery. M. D. Lederman.

Cincinnati Lancet-Clinic, May 27.

92.—*Agitate the Alcohol Question in the Profession. W. E. Shaw.

New York Medical Journal, May 27.

93.—*General Diagnosis of Syphilis of Brain and Spinal Cord. B. Sachs.
94.—*Intention: a Study of the Bovine Brain. Wallace Wood.
95.— Retention of Urine. Ramon Guitéras.
96.—*Inhibition. S. J. Meltzer.
97.— A Little Point of Great Importance in Transfusion. Louis Julian y Genella.
98.— Landry's Paralysis. W. H. Haynes.
99.— Antistreptococcic Serum in Puerperal Septicemia and Pelvic Cellulitis. A. G. Deardorff.

Medical News (N. Y.), May 27.

100.—*Non-Tubercular Inflammation of Spine. T. Halsted Myers.
101.—*African Black-Water Fever. Franklin Pierce Lynch.
102.—*Relative Death-Rates from Cancer and Consumption. John H. Pryor.
103.— Cod-Liver Oil. Thomas E. McArdle and W. H. Wiley.

Medical Review (St. Louis), No.

104.—*Faith Cure Fakirs. Wm. M. Reedy.
105.— Bacteriology and Demonstration of Diplococcus Intracellularis Meningitidis. G. C. Crandall.
106.— Symptomatology of Cerebrospinal Fever. Given Campbell.
107.— Diagnosis of Cerebrospinal Fever. Elsworth Smith, Jr.
108.—*Treatment of Whooping-Cough. Milton P. Crewl.
109.—Ear and Throat Infection with Subsequent Involvement of Neck. Ernest H. Cole.

Maryland Medical Journal (Baltimore), May 27.

110.—*Recent Investigations on Malaria. W. S. Thayer.
111.— Study of the Human Gait. E. H. Bradford.

Philadelphia Medical Journal, May 27.

112.—*Symptomatology of Tumors Involving the Hypophysis Cerebri. James Stewart.
113.—*Anesthetizer as a Specialist. D. H. Galloway.
114.— Cold Baths in Tropic Fever. Charles E. Woodruff.
115.— Case of Presystolic Mitral Murmur Associated with Systolic Tricuspid Murmur Complicating Pregnancy. James Tyson.
116.— Some Prophylactic Measures with Especial Reference to Infants and Children. W. L. Johnson.
117.—*Description of New Method for Implantation of Glass Balls into Orbital Cavity. Charles A. Oliver.
118.— Pathology and Treatment of Nasal Ulcer on Septum Nasi and Floor of Nasal Passage. Hiram L. Leffingwell.
119.—*Simple Gauze Packer. Wm. C. Bane.

1. **Leucocytosis.**—The purpose of Dr. Burrow's paper is to record some observations made on seven patients during and after convulsions, to test the question as to the leucocytosis observed by Capps, and to ascertain its special characteristics. One of the cases was senile dementia, one terminal dementia, two general paralysis, one catatonia and one puerperal eclamp-

sia. Two cases without convulsions were also studied, one a paretic and the other a healthy man. He found that there is a leucocytosis associated with the convulsion and, in a general way, related to the severity of the attack. Its duration is variable, from three to four to twelve to fifteen hours. The condition is of the inflammatory type after the convulsion. The more severe and pronounced the convulsions, the higher the percentage of polymorphonuclear elements with a corresponding decrease of the mononuclear elements. He analyzes his cases elaborately and comes to the conclusion that the muscular work of the convulsion can not alone explain the leucocytosis which follows it. This is made up of two elements, the physiologic, due to muscular work, in which the different forms of leucocytes are increased proportionately, and a pathologic one, in which the polymorphonuclear elements are increased out of proportion to the other forms. The leucocytosis due to muscular work has disappeared in an hour or two after the convulsion, leaving only the pathologic form present; the former is superimposed upon the latter.

2.—Brain Tumor.—Gordinier reports in detail a case of brain tumor affecting the posterior portion of the second left frontal convolution. The interest of the case is in the question as to whether there exists a special center for writing, and he believes that there is no doubt that the cause of the complete agraphia that existed was due to the destruction of the base of the second left frontal convolution and that the retarded cerebration and ataxia which appeared later were due to the extension of the process farther into the frontal lobe. There was no aphasia and reading was possible. The only aphasic trouble from the beginning was the complete inability to write.

3.—Sarcoma of Testicle.—Kober gives conclusions based on an analysis of 114 cases, discussing the causes, varieties, symptoms and prognosis of the condition. He finds that the results of operative interference have been gratifying and that the only treatment that is at all hopeful is prompt and radical extirpation. His cases are collected from the literature, to which he adds six personal observations.

4.—Detachment of Retina.—Foster reports a case of retinal detachment and discusses the condition and the views that have been expressed in regard to its origin and treatment. He concludes that the mode of occurrence is uncertain, as is likewise the pathologic process which is its actual or exciting cause. As regards treatment, he thinks absolute rest the most essential factor, and it must be secured in bed with the eyes covered with a pressure bandage, whatever other treatment is employed. In cases of this sort we must endeavor to determine if possible the actual cause and restore the best degree of vision in our power. If traction bands exist in the vitreous, they may be divided; if serous accumulation is great it may be evacuated, but our main reliance is still rest in bed, whatever depleting or other methods are adopted.

5.—Veratrum Album and Veratrum Viride.—The Drs. Wood report experiments as to the comparative physiologic and therapeutic actions of the American and European species of veratrum. They conclude that the only important difference between the two is that the species *album* more frequently purges when taken in toxic doses than does the other, and that some specimens of it are stronger than those of the other species. They do not think that there would be any special therapeutic difference between the two. Any that would exist would probably be in favor of the American drug as less apt to disturb intestinal digestion. They do not therefore, see the expediency of the recognition of both species by the American pharmacopeia.

6.—Fatty Degeneration.—Taylor, after a review of the published facts as to fatty degeneration, concludes that the formation of fats out of the proteids physiologically has not been demonstrated or made probable, nor has its pathologic formation been demonstrated. On the other hand, the weight of evidence is in favor of the conception of the so-called fatty metamorphosis and infiltration or formation of fats or carbohydrates. This, however, is not absolutely conclusive. One can not say that fatty formation from proteids is impossible.

7.—Cancer.—Frazier reviews the recent literature, chiefly that in the *Practitioner* for April, on this subject. (See JOURNAL, April 29, p. 934.)

8.—See abstract in JOURNAL, March 11, p. 551.

9.—Ibid.

10.—Ibid.

11.—Ibid, p. 550.

12.—Ibid.

13.—Ibid.

14.—New Ecraseur.—Bissell describes an instrument which he claims to have special advantages in pelvic surgery, and reports a case in which it was employed.

16.—Early Diagnosis of Cancer.—Frederick calls attention to the great importance of an early diagnosis of pelvic cancer at the menopause. Hemorrhage at this period, especially if frequent and excessive, should never be disregarded, but should always lead to a thorough examination. He thinks the profession has been lax in this matter and many lives have been lost in consequence.

17.—Management of Labor Cases.—Thomas gives in full detail directions for the management of obstetric cases in private practice, from the beginning of pregnancy, also including the hygiene and diet of the child.

18.—Retrobulbar Neuritis and Facial Palsy.—DeSchweinitz reports two cases, in the first of which the patient first had right facial palsy, two years later right retrobulbar neuritis, followed two and one half months later by a left retrobulbar neuritis, with ultimate complete recovery. In the second case there was first sclerokeratitis, probably depending on menstrual disturbances, soon after right facial palsy, two years later sclerokeratitis without facial palsy, one year later sclerokeratitis followed in six weeks by right facial palsy, finally, two years after, left retrobulbar neuritis, terminating in partial atrophy of the optic nerve. He suggests a toxic cause.

19.—Infantile Spinal Paralysis.—The fact that spinal disease in the form of progressive muscular atrophy of the Aran-Duchenne type has been observed to occur in later life in those who have been subject to infantile paralysis has been variously accounted for, e. g., by irritation of the cord by the ancient lesion, and, by another theory, through special vulnerability of the cells of the anterior horns, and, by still another, through inflammation starting from the old lesions. Hirsch, in view of these facts, considers himself fortunate in having a case in which there was afforded a post-mortem, and which revealed a condition of interstitial myelitis. The third theory, that it arose from irritation from the old scar, would seem to fit the clinic and anatomic facts of this case. He discusses the subject at length in the light of its literature.

20.—Lipoma of Filum Terminale.—Spiller reports a case observed by him in Dejerdine's laboratory in which a tumor was found about .5 cm. below the origin of the filum terminale. Microscopic examination showed it to be a lipoma. The rarity of the case makes it of interest. Regarding the effect of such a tumor, he suggests that it may cause pressure paralysis of the nerves of the cauda equina, causing genito-urinary symptoms which might lead to false diagnosis, of carcinoma of the bladder, for example, as in a case reported by Lachmann.

21.—Do Epileptics Recover?—Spratling considers that we may call an epileptic recovered after a sufficiently lengthy period of freedom from fits, but that we must always contemplate the possibility of a recurrence of the disease.

22.—Weak Feet.—This paper treats of the anatomic defects causing flatfoot and the foot gear which favors it.

23.—Miliary Aneurysm.—Taylor reports a case of generalized arteriosclerosis of a mild degree in the nervous system and kidneys, cortical cell degeneration in the brain with multiple miliary aneurysm, chiefly in the gray matter, with associated hemorrhage—many small areas of softening of the brain and slight degeneration of the pyramidal tracts in the medulla and cord. The interest of this case is in the number and conspicuousness of the aneurysms.

25.—Paraxanthin.—Putnam and Pfaff combat the theory advanced by Rachford, of poisoning in certain neuroses, such as migraine and epilepsy. Their specimens were from five cases of typic migraine and a large number of epileptics. They failed to corroborate Rachford's results and attribute the effects observed by him to ammonium compounds instead of paraxanthin.

26.—Empyema.—Lanphear describes the causes, morbid anatomy, bacteriology, etc., of empyema, and gives treatment. He unreservedly condemns aspiration and believes that in children simple incision is sufficient, as the lung readily re-expands, but in adults excision of the ribs is best. To secure re-expansion of the lungs something may be done by free opening and breaking up the adhesions with the hand, but this is not promising in all cases. In cases of double empyema, he thinks the proper plan of procedure is to operate on one side and aspirate the other, waiting a few days until the lung expands and the patient rallies, and then attack the other side.

27.—Wounded from Santiago.—Schooler shows that the late war was, in its surgical and military aspects, one of the most successful ever conducted, contrary to the common hysteric notions now current. This is especially the case as regards the wounds received. The freedom from septic infection was remarkable. He describes the wounds as made by modern projectiles.

28.—Tuberculosis of the Larynx.—Sampson's paper calls attention to the difficulty occasionally met with in the diagnosis be-

tween tuberculosis and syphilis of the larynx, and emphasizes the importance of finding the tubercular bacillus in the lesions. This failing, the use of iodid of potash is not only justified but demanded in cases of primary, dubious ulceration of the larynx. In cases secondary to pulmonary tuberculosis, prognosis and prospects of treatment are not so good.

29.—Gastroenterostomy.—Davis' paper points out that the mortality of this condition is no longer prohibitory, and reports three successful cases. An indication for the operation is stagnation of the food in the stomach not relieved by medical means, and in which pylorectomy or pyloroplasty is not indicated or advisable. The three well-recognized indications are: malignant pyloric stenosis, benign pyloric stenosis and gastric ulcer. Each of these conditions is discussed in the light of modern acquisitions in this field. The literature is referred to quite thoroughly.

31.—See JOURNAL, May 27, p. 67, p. 1166.

32.—Dislocation of the Cervical Vertebræ.—Butler reports the case of a man who fell off a train, striking the back of his head and producing dislocation of the second cervical vertebræ, which was reduced as far as possible and fixed by ligature. The patient had been drinking before the accident. On the fifth day after the accident he became very delirious and died later in acute delirium, with temperature ranging as high as 108 in the axilla. Post-mortem showed no macroscopic indications of brain disease nor was the cord noticeably injured. Apparently there was no microscopic examination.

36.—Effects of High Altitudes.—Whitmore calls attention to the advantages and disadvantages of high altitudes and the precautions necessary for those in such situations. A high altitude is undesirable for a weakened heart, and the cardiac depressant, when used must be carefully watched. The effect of altitude on the nervous system is often great, causing marked depression or excitement, migraine and neuralgia. More rest and sleep are required. Stimulants, tea and coffee, are unadvisable. Secretion and excretion are interfered with. Fecal impaction simulating appendicitis may occur. While malaria and tuberculosis are unknown, and typhoid fever is rare, pneumonia is particularly fatal and catarrhal affections are common.

40.—Expulsion of Placenta.—Woodworth advises bimanual pressure, encircling the uterus through the abdominal wall with the fingers and gently and gradually squeezing out the placenta and coagula. He believes this is the best method. In cases of adhesion of the placenta it may first require detachment.

42.—Chronic Kidney Diseases.—The special points in VonNoorden's paper are the questions of diet. He criticizes the common rule of prohibiting dark meats in chronic kidney diseases, the essential difference between light and dark meats being their coloring matter, the chemic constitution of which is not exactly known. Regarding the question as to amount of drink that should be allowed, he disagrees with von Bamberger, and advocates the restricting of liquids in chronic contracted kidneys. He reports cases to show the therapeutic effects of this restriction.

43.—Gall-stones.—McFarland's paper reviews the subject of gall-stones, their causes, frequency, treatment, etc.

44.—Electrolysis.—Stewart describes the methods of employing electrolysis for eradication of superfluous hairs, birth-marks and strictures.

49.—Syphilis of Heart and Lungs.—Weber reviews the data of cardiac syphilis and shows that it is often a very late manifestation, and that it may be relieved by treatment even after many years.

51.—In Medical Wards.—Porter's article is a very extensive one, covering the subjects of anemia, intestinal digestion with imperfect hepatic action, sclerosis of the liver, lymphadenoma and rheumatism. It is impossible to abstract all the important points made in the discussion of these subjects.

53.—Faulty Diagnosis.—Schaefer calls attention to the errors daily made in urine examinations, and mentions the various serious errors that are often made by physicians, life insurance examiners, etc.

54.—Varicose Ulcers.—Valençon believes that protargol is the best antiseptic for varicose ulcers, and reports four cases in which it has been employed with advantage. His method is to first wash the wound and surrounding parts with an antiseptic solution (boric acid or cyanid of mercury 1 to 5000), dry the parts with absorbent cotton, dust the ulcer with protargol, cover the wound with a piece of protective, and then apply the ordinary dressing.

55.—Percentum Solutions.—Gubbins advises prescribing by volume instead of by weight, to figure accurately the amount of drugs in solution.

56.—"Christian Science."—Sippy, in his lecture, reviews the history of medicine and shows that "Christian Science" is in the general line of medical delusions which have existed from time to time throughout the history of the world. He shows up its absurdities and quotes from the books of the "prophetess" Eddy.

57.—Melancholia and Mania.—Brower gives a clinic lecture of cases of acute melancholia and mania, showing the general line of treatment and the necessity of isolation in hospitals in certain stages and conditions of the disease.

58.—Paraldehyde.—Shoemaker discusses the properties of paraldehyde and reports cases of its use in insomnia, kidney disease, heart disease, tuberculosis, chorea, melancholia, alcoholism and asthma.

59.—Two Interesting Cases.—Porter reports two cases, one of weakened heart, in regard to which he describes the action of digitalis and its contraindications and advises as drug treatment the use of caffein, strychnin, camphor, belladonna, opium, etc. The second case is one of pleurisy with effusion, treatment by aspiration.

60.—Carbolic Acid in Tetanus.—H. C. Wood, Jr., concludes from the study of the Italian literature on the subject that carbolic acid gives better results in tetanus than does the antitoxin treatment, as it acts by antagonizing the toxin and quieting the nervous system. It should always be given hypodermically and in sufficiently large doses, cases of tetanus being remarkably tolerant to it. In the meantime other methods of treatment should be continued and special stress is laid upon the disinfection of the wound. Baccelli's method of using carbolic acid for this disorder is to first thoroughly cleanse the wound with strong antiseptic solution, place the patient in a quiet room, observe the ordinary rules of diet, etc., and give hypodermic injections of a 2 per cent. solution of carbolic acid at two or three hour intervals. If the case is of only moderate severity, the commencing dose may be 0.20 gm. in the twenty-four hours. This, however, should be rapidly increased to at least double or triple the quantity. According to the table given in Ascoli's paper, the mortality was only 3.2 per cent., while under the Tizzoni and Behring toxins it was 17.8 and 35.7 per cent. respectively. The figures are certainly very remarkable.

61.—Treatment of Acute Pneumonia.—Mays says that the main indications are the reduction of fever, diminution of the body of blood in the lungs, and support of the nervous system. He believes ice applied to the head and chest will meet these indications in the most satisfactory manner. He applies it in a flat rubber bag, wrapped in thin toweling, and continues it as long as the fever is high, gradually removing the ice as the fever falls. As to drugs, strychnia as a stimulant to the heart in doses of $\frac{1}{30}$ gr. four times a day, capsicum in doses of 10 drops to a teaspoonful of the tincture every three or four hours, in water, gives often the very best results in cases of low alcoholic pneumonia. The other indications are to secure sleep, oxygen given by inhalation to relieve dyspnea and cyanosis, and in case it fails to relieve these symptoms, venesection is advisable. If a rheumatic or grip complication exists, the salicylates are used. These measures, with concentrated nourishment, comprise the treatment he advises.

62.—Some Uses of Strychnia.—Jackson calls attention to the value of strychnin in cases of chloral and morphin poisoning and reports a case in which injection, hypodermically, of $\frac{1}{100}$ gr. every twenty minutes saved the life of a man who had taken, designedly, 280 grains of chloral and a grain of morphin. Strychnia is also better and more reliable than ergot as a uterine motor stimulant.

63.—Rheumatism.—Eshner briefly discusses the etiology and treatment of rheumatism. He thinks that it is probably the outward manifestation of the effects of various causative factors, some infective, some toxic. The salicylates hold first place in the treatment and should be given in sufficient doses; local treatment to relieve the pain, heat, counterirritants, electricity, etc.

64.—Trional.—Coile believes that this drug is a prompt and safe hypnotic when given in doses of about 15 grains, to an adult, repeated in an hour if sleep is not produced. He has never seen any unpleasant or dangerous symptoms.

65.—Lumbago, etc.—Gillespie's paper is chiefly a review of the diagnostic points between lumbago and lumbar sprain. He epitomizes them as follows: Lumbago has a short duration; its causes are predisposition, rheumatic or gouty diathesis, exposure or overfatigue; pain is tearing or aching and confined to a single muscle or group of muscles, and is aggravated by movement. There are no outward signs; it is rarely painful to the touch; no especial decubitus, and it is aggravated by

heat, while constitutional symptoms are rare. In lumbar sprain the duration is fourteen to twenty-eight days; the cause is injury by twist, fall or direct force; the pain is acute, lancinating and diffuse; there is local heat, swelling, discoloration and local tenderness; special decubitus is present on one or the other side with the knees drawn up; heat relieves, and constitutional symptoms are nearly always present.

66.—Diagnosis of Tuberculosis.—McKay rapidly runs over the principal symptoms of incipient tuberculosis: loss of weight, condition of chest and lungs, accelerated pulse, increase of evening temperature, cough on rising and retiring, and the bacteriologic and tuberculin tests. He calls attention to a method of examining the chest, which he recommends: Direct the patient to fold the arms across the chest, placing the hands on the opposite shoulders, then carefully examine the apex beneath the scapular covering and whenever there is increased bronchial breathing with a slight crackling sound, especially after coughing, one should suspect incipient tuberculosis.

67.—Infant Feeding.—This paper discusses the method of supplying the nearest to the natural infants' food in cases where this can not be had. It is detailed and can not very well be abstracted.

68.—Appendicitis.—This paper is concluded from the previous number and emphasizes the importance of operation as opposed to the so-called conservative methods.

69.—Cold a Producer of Scurvy.—Botkin, from experience in the Klondike, believes that cold is a more important factor than diet in the production of scurvy. Sudden and radical change from a temperate to an excessively cold climate is also of importance. The blood had not time to fortify itself, and the cause continually operating, and with increased severity, allowed no opportunity for the system to prepare itself to meet the condition. It was like progessive anemia. In fact, the anemia was the essential condition that demanded treatment. In his experience scurvy affected the vigorous as well as the weak, and without regard to diet, which was all that could be desired.

71.—Pulmonary Tuberculosis.—This paper reports two cases in detail, out of twenty-four in which the disease had made severe inroads on the lung tissue, forming cavities and producing hemorrhage, six of them recovering. Another class of cases, in which the disease was less advanced, was forty-four in number, with twenty-one recoveries. The remedy which he seems to think most valuable is carbonate of guaiacol.

72.—Homeopathy.—Dr. Cole's paper is a criticism of the inconsistencies of modern homeopathy, which he thinks exists principally in name.

75.—Retained Fetus.—Adams reports a case of retention of a fetus from Aug. 17, 1892, the time it was due to have reached maturity, till Jan. 24, 1899, approximately six years and five months, when it was removed by operation, decomposition having taken place.

76.—Sick and Wounded of the Revolution.—Packard's paper is an interesting historic sketch of military surgery during the revolution.

77.—Pus in Pelvis.—Deaver calls attention to the importance of pus in the female pelvis, due to appendicitis, and gives in detail the important points for its recognition and the diagnostic points between it and other conditions, as salpingitis, tubal pregnancy, etc.

78.—Wounds of Abdomen.—McRae disagrees with some recent authorities who have minified the importance of abdominal wounds, and states his conviction that any case of penetrating wound of abdomen seen early, when there is reasonable doubt as to the injury of the viscera, should be subjected to at least an exploratory operation. He reports nineteen cases of gunshot and other wounds of the abdomen with seventeen operations and eight recoveries. One case not operated on recovered.

81.—See JOURNAL, May 27, ¶ 127, p. 1168.

83.—Posture in Occipito-Posterior Position.—This paper is an argument for the use of gravitation in producing normal presentation of the head in cases of occipito-posterior position. The author has found that a kneeling posture with the body bent forward, the head and arms resting comfortably on a bed or chair, continued over a considerable period, is often an excellent method of producing anterior rotation. As soon as this is accomplished, the patient is advised to assume the most comfortable position she finds in bed until the time of delivery is at hand, when the left lateral posture is most comfortable.

84.—Typhoid Perforation.—Miller reports a very interesting case in which there was apparent cure after pronounced symptoms of perforation, followed by a subsequent relapse some eight or ten days later, causing death. The autopsy showed that a strand of the omentum had become attached to the ileum, serving to close an aperture in an ulcerated Peyer's patch. A subsequent perforation caused the fatal outcome. He believes that cases of cure of intestinal perforation without operation have been brought about many times in this way.

85.—Mosquitoes and Yellow Fever.—Finlay claims the credit of having attributed to mosquitoes the agency of transmission of yellow fever since 1881. He thinks that tropic mosquitoes are conveyed in the holds of vessels, etc., and that they do not voluntarily migrate to any great distance. He rather endorses the theory of Dr. T. H. Smith, which maintains that the faculty of transmission of the disease need not be limited to the individual mosquito first contaminated, but may be inherited by his descendants. Under such conditions any well-authenticated facts regarding the transmission of yellow fever can be explained. He suggests as a preventative the isolation of yellow fever patients from mosquitoes by windows protected by netting, well-ventilated hospitals, good drainage and sewerage and only the upper stories occupied. He believes that with such measures, well carried out by an efficient board of health, yellow fever might be stamped out of Cuba and Porto Rico and malaria might be reduced to a minimum.

86.—Antitoxin in Diphtheria.—This paper takes a somewhat reactionary view as regards the value of antitoxin, and the author goes into an extensive report of statistics in his efforts to show that the antitoxin has not been as effective as has been claimed. He tries also to show that antitoxin is dangerous, and that many lives have been sacrificed that might have been saved by the use of the time-honored remedies. It is doubtful whether his *ex parte* arguments will convince very many at the present time, but it is a good illustration of the tendency of some individuals to take the off side in important questions like this.

87.—New Operation for Epithelioma.—Grant criticizes the ordinary V-shaped operation for epithelioma. He advocates one of his own, which seems to be the extraction of a square section including the growth and bringing the sides together, making three triangular flaps. His method can only be best explained by the diagram which he gives. He reports several cases and claims that the flaps make traction of the cheek and not of the lip and that there is less tension on the lip, which is more prominent and natural in consequence and more flexible in use, and the mouth is less apt to be disfigured.

89.—Vaccination.—Lofton calls attention to certain clinic points in regard to vaccination. He does not believe that it is necessary to use elaborate methods of preparation; ordinary cleansing with cold water has been sufficient for him. The glycerinated virus in glass tubes retains its virtues almost indefinitely. He has carried them in his vest pocket for eight months and then they acted as if perfectly fresh. He believes that some people are naturally immune and also immune to smallpox. He has met a few such where vaccination could not be effected. He advises the use of the vaccin shield early and has been successful in vaccinating obstinate children when asleep.

92.—Alcohol.—Shaw's paper is an earnest plea for the profession to act against the evil of alcohol and avoid its use in medicine as far as possible.

93.—Syphilis of Brain and Cord.—Sachs' paper dwells on the general character of the morbid manifestations in the diagnosis of cerebral and spinal syphilis, on the multiplicity of symptoms, the tendency to remission and relapse, the incompleteness, so to speak, of the functional disturbances, paresis rather than paralysis, partial anesthesia and aphasia. As regards special symptoms of pathognomonic value, he suggests apoplectic seizures in the absence of renal disease in middle life, persistent headaches, epileptiform attacks, spastic paralytic symptoms of the lower extremities not following spinal injury or other tangible cause, in youth or middle life. But the most characteristic symptoms are to be found in the pupils and their reactions, such as unequal dilation or reflexes, complete pupillary rigidity, which has the sanction of Jonathan Hutchinson as a syphilitic symptom, and he also adds their irregularity of form when there has been no previous iritis. Syphilitic double optic neuritis is also a matter of great importance. He believes that disease of the blood-vessels is in all cases a primary factor.

94.—Bovine Brain.—Wood thinks that the brain of a bull is distinguished by a highly developed prorean lobule on the mesial surface, a tremendous cerebral development directly between the eyes, which is lacking in cows and oxen, and he attributes to this the will power so characteristic of this animal.

96.—Inhibition.—The general conclusion in Meltzer's paper may be briefly stated as follows: Inhibition co-exists with and is an integral part of irritability. The actual phenomena of life are not pure manifestations of either one of these factors

but are the resultants of two antagonistic forces. There is no absolute rest in a living part and no action without an admixture of inhibition. All biologic laws heretofore formulated not recognizing these facts will have to be revised. In the peripheral, as well as in the central organs, activity and inhibition are apparently separately accessible by special nerve fibers by which the required degree of inhibition or action is brought about.

100.—Inflammation of Spine.—Myers thinks the pendulum has swung too far in the direction of diagnosis of tubercular disease of the vertebræ, and points out a number of conditions in which other causes were present and tuberculosis absent. He illustrates these views with cases which he reports in more or less detail. The conclusions which he draws are: Syphilitic treatment should be pushed whenever there is a possibility of this disease being present. Brilliant results will often follow. Fractures should be more carefully protected for a longer period to prevent deformity and paralysis and relieve pain or disability. Rheumatoid arthritis can be rendered less deforming and less dangerous to life by securing ankylosis in a good position, if it can not be avoided. It is important to remember, from a medicolegal point of view, that not all chronic increasing kyphoses are tubercular, and therefore exorbitant damages should not be awarded in all such cases. The beneficial effect on the patient and his family of the recognition of this fact are also to be considered. Life insurance should not be refused such subjects in any general way. It is best to consider each case separately when mistakes in diagnosis can be so readily made.

101.—Black Water Fever.—Dr. F. B. Lynch of the Baptist mission in southwest Africa describes black water fever as it has occurred under his observation. It is a disease that attacks persons who are careless in their habits and have been one or two or more years in the country. It has very rarely occurred among women of European blood in this region. Convalescence is remarkably rapid when it occurs, but relapses may occur from neglect of precautions, or of continued use of quinin. Quinin is, he thinks, almost a specific against this disorder. A case of a man who after an attack had taken five grains of quinin daily for at least ten years, and had thus escaped a recurrence of the disease, is reported. He gives his method of treatment of a case in detail, but it can not be fully described here.

102.—Cancer and Consumption.—Pryor criticizes recent statements in regard to the increase of cancer as compared to that of consumption, and believes that the increase of the former and the decrease of the latter have both been exaggerated. He thinks that the possibility of the death-rate of cancer exceeding that of consumption in the near future can only be realized by some occurrence that is very improbable.

104.—Faith Cure.—Reedy's paper is an argument against faith curers, and in favor of interference by the authorities. He holds that they are responsible for all who die under their care and are dangerous to a community as favoring the spread of infection. They should be obliged to report to the health office so that investigation can be made as to the danger of infection and contagion and to determine whether the patient is under compulsion and denied the services of a regular physician and whether adequate steps have been taken for his relief.

108.—Whooping-Cough.—Creel depends on the time-honored remedies—belladonna, ipecac—in the treatment of whooping-cough. He gives also as an antispasmodic, sodium bromid in doses of five grains every four hours. He also thinks that the use of Schering's formalin lamp in the sleeping-room, consuming about one formalin pastile every three or four hours is of great service. It causes little irritation, and inhalation of the disinfectant has a good effect. He also urges the adequate feeding of these patients, which is often overlooked, and cautions particularly against exposure to the weather after the attack. Out of 100 cases of whooping-cough thus treated, 75 recovered in ten days, 10 feeble children suffered for fifteen days; and in 10 cases, complications with other diseases already existed, and 5 were not seen through the illness, but presumably recovered.

110.—See abstract in JOURNAL, May 6, p. 999.

112.—The Symptomatology of Tumors.—Stewart records two cases, somewhat similar in character, but without symptoms of acromegaly. The first case occurred in a woman of 35 years. Symptoms: Headache, vomiting and temporal hemianopsia; finally, by infiltration of the growth into the ethmoidal and sphenoidal cells, causing hemorrhage from the nares. No nutritional disturbances were apparent: death occurred twenty months after the first symptoms appeared. Post-mortem, a tumor was found at the base, lying in the sella turcica, and occupying the site of the pituitary body, of which no vestige could be seen. The tumor lay in the median line, in an oval evacuation in the base of the brain. The diagnosis of perithelial angiosarcoma of the pituitary body was made. Cirrhotic changes were observed in the kidneys, uterus and ovaries. Case two was a male, aged 42, the symptoms extending over nine years. Frontal headache, with occasional vomiting; gradual loss of vision of both eyes, terminating in total blindness in the left, and temporal hemianopsia in right; later, total extinction of light perception; giddiness, tendency to fall forward; profuse intermittent flushings, and perspiration about face and neck; slow cerebration; drowsiness; lowered temperature; hallucinations involving some of special senses; blood changes corresponding to those met with in pernicious anemia; skin lemon tinted; puffiness of the skin of hands and feet; last two years of life confined to bed; listless; rational; death preceded by coma. Post mortem disclosed a large endothelioma of the pituitary. The bone in the neighborhood was found greatly atrophied and the fossa enlarged; of special interest is the fact that the case presented a myxedema-like state and a peculiar cutaneous pallor.

113.—The Anesthetizer.—Galloway makes a strong plea for the general recognition of the qualities of a thoroughly trained anesthetizer. While considering the field sufficiently broad for specializing, he points out the difficulties in obtaining anything like sufficient compensation at the present day.

117.—See JOURNAL, June 3, p. 1254: "Phil. Col. of Phys."

119.—See JOURNAL, March 25, p. 662.

FOREIGN.

British Medical Journal, May 13.

Encysted Vesical Calculi, with an Account of Twenty-Seven Cases. W. BRUCE CLARKE.—This paper contains reports illustrating the anomalous symptoms that encysted calculi produce. No one symptom was of important diagnostic value. Of the twenty-one cases in this series (six were reported before), fifteen were over 60 years of age, hence the presence of cystitis and enlarged prostate was not remarkable. In several instances, washing out the bladder sufficed to temporarily restore the urine to its normal state, thus further embarrassing the diagnosis. The stones also, in several cases, after extraction, were so coated with mucus as to give no audible note when struck with the sound. The fact that in less than one-half the cases was the existence of the stone known before the operation, shows the importance of bladder exploration. Clarke has, therefore, made it a rule to explore the bladder in obscure cases of enlarged prostate which remain irritable after repeated washing and has had no reason to regret the course.

Antistreptococcic Serum in Treatment of Smallpox. W. J. LINDSAY.—The author noticed, while in charge of the Middlesborough Isolation Hospital, that death from smallpox most frequently occurred from three to seven days after the pustules began to dry and be absorbed. From the symptoms, he suspected that the poison of variola was reinforced by other pyogenic virus, and the remedy for this complication would be found in prevention of suppuration or injection of antitoxins. The difficulty of the former is very great, so he concluded, as the streptococcus seemed likely to be the pyogenic factor, to use antistreptococcus serum obtained from the Jenner Institute. Only the gravest cases were selected for the test, and the serum was injected into the abdominal subcutaneous tissue, either just before or coincidently with pustulation, at intervals of twelve to twenty-four hours, in addition to other treatment with digitalis and tinctura ferri chloridi or liquor strychninæ. He report ssix cases thus treated, with two deaths. The serum treatment shortened the critic period and lessened the tendency to cardiac failure or collapse. The pulse kept regular and strong. Convalescence set in earlier and progressed rapidly. Not one of the four patients that recovered developed a single abscess during convalescence, while others not so treated and as promising suffered much in this way. No inconvenient local effects followed the injections.

Treatment of Dysentery. D. M. ROSS.—The author believes that in the individual treatment of cases of dysentery, ipecacuanha is not the antidysenteric for all cases. In his experience sulphate of magnesia seemed more effective in the blacks. A rough outline of the general treatment he advises is as follows: rest for the alimentary canal; fomentation, if needed, to relieve colic; removal and prevention of fecal accumulations by ipecacuanha, sulphur, magnesia or castor-oil, when it can be borne, lavage of large intestine by warm enemas of permanganate of potash or boric acid, followed, if needful, by starch and opium enemas to relieve tenesmus. When the stools become fecal, gradual substitution of intestinal antisep-

tics, bismuth salicylate or subnitrate, salol, resorcin, naphthol; if ulcers appear to be slow in healing, astringent injections carefully administered; tonics; where possible, change of air. Patients should be removed from sources of infection; should not continue drinking the water in which infection was possibly conveyed, etc. In severe, unresponding cases, care should be taken not to weaken the patient too much by a too protracted course of ipecac, or too long use of sulphate of magnesia. It is better to resort earlier to intestinal antiseptics and to interrupt this treatment by resorting to the former drugs, if indicated. The less opium used the better, in Ross's opinion, though sometimes it has to be employed. In all severe cases give careful attention to the circulatory system. He has never seen hepatic abscess follow dysentery contracted in Jamaica; all cases seen came from Central America.

Lancet, May 13.

Clinic Lecture on Secondary Melanotic Sarcoma of Liver. H. D. ROLLESTON.—The case reported by the author is that of a man aged 59, in whom a sarcoma existed in the right eye, and the diagnosis of liver sarcoma from the symptoms was therefore favored. A necropsy confirmed the diagnosis. He discusses the pathology and symptoms at length and recapitulates as follows: Malignant melanotic tumors, though usually spoken of as sarcomatous, are not so necessarily; probably a fair portion are carcinomatous. Secondary melanotic growths in the liver are more often found to follow primary growths of the uveal tract and reach a larger size than when secondary to cutaneous growths. The hepatic growths are more frequent in men than in women in the proportion of 2½ to 1. The average age of patients dying with secondary melanotic hepatic growths is 48.7 years. Ascites occurs in more than one-fourth of the cases, and jaundice in about one-sixth of the collected cases. The urine contains melanin, though when freshly passed it may be in a colorless form (melanongen). Its detection may be of use in diagnosing a doubtful case of hepatic enlargement.

New Method of Reduction in Separation of Lower Epiphysis of Femur. J. HUTCHINSON, Jr., and HAROLD BARNARD.—The authors of this article supplement a former paper of theirs, in which they insisted on the value of full flexion of the knee in the reduction of separation of the lower epiphysis of the femur, and they now report three more cases, illustrated by skiagraphs. They conclude that separation of the lower epiphysis of the femur is a very serious injury and is attended, when compound, by a high mortality; that in the extended position of the knee, even with an anesthetic, reduction of the fragment is very difficult, if not impossible; that when the epiphysis is not reduced the patient is laid up for about three months and is lame for about six months, while the end of the epiphysis requires removal by operation. Shortening of the limb and secondary curves of the spine always follow. Nevertheless, the ultimate results in most cases that recover at all are good. The articular surface of the femur gradually grows into a useful position. With the method of full flexion reduction is always easy, the treatment is short, and it is the rule to obtain perfect movement in the knee without shortening or deformity of the leg.

Suggestion for Treating the Attached Border in Simple Suture of the Intestine. ERNEST FRAZER.—The author suggests as an aid to the union of the divided ends of the intestines the rotation on its longitudinal axis of each segment of gut, one forward and the other backward, so that the plane of the mesentery of one segment lies a little behind that of the other. When the two segments are fixed in position the tissues in the triangular intervals are opposed to the opposite peritoneal coat, to which they can adhere quickly and firmly, and when this portion of the circumference is united the remainder of the divided mesentery can be sutured in the usual way. The advantage he claims for this method is that at any point on the sutured circumference there is peritoneum on one or both sides, thus allowing no more danger at the attached borders than at any other part of the divided edges.

Annales de Dermatologie et de Syphilographie (Paris), April.

Etiology of Eczema. R. SABOURAUD.—"This question is the first on the program of the Congress of Dermatology in 1900, but no discussion of it can be profitable until we better define the meaning of the term, eczema. Does it include all eczematizations, intertrigos, red dermatitis with exudation, of medicinal origin or spontaneous, seborrheic eczema and eczema in trychophytoid patches on the back of the hand and arm and the callous and fissured eczema of the palm and sole? Until these lesions have all been made the subject of profound and individual study, it is useless to discuss the origin of eczema in general." "We must consider the problem of the etiology of eczema as an enormous fortress to be taken, a fortress that is still almost intact, and with scarcely a breach made. It is not even invested as yet, and to attempt a general assault is absolute folly. Sappers and miners, not generals, are needed for the present."

Treatment of Mercurial Stomatitis. A. LANZ.—A good dentifrice, gargle, and painting the gums with an antiseptic and astringent mixture, are the prophylactic measures recommended, but if the stomatitis has developed, nothing cures it more effectually than a 2 per cent. solution of peroxid of hydrogen used as a gargle.

Nord Medical (Lille), May 1.

Peripheral Nervous Troubles in Pulmonary Tuberculosis. G. CARRIÈRE.—By research and experimentation Carrière has established that in 50 per cent. the nerve troubles are purely functional disturbances; in 40 per cent. there is peripheral neuritis, and in 10 there are lesions in the brain and cortex appreciable by Nissl's method; also that they are caused by the toxins secreted by the Koch bacillus, or possibly in a few cases by some secondary microbic association. Medication by the stomach must be avoided in phthisis. If the pain is excessive, he relieves it with external local applications of methyl salicylate alone or with equal parts of guaiacol. He has also found methyl chlorid spray effective, and "menthalcetic ether."

Presse Medicale (Paris), May 10.

Bacteriology of Intestines. A. B. MARFAN and L. BERNARD.—The fact that fasting is one of the best means of realizing asepsis in the intestines and that the digestive juices destroy germs in proportion to their nearness to the pylorus, are the important results of recent research by these authors, who announce that the intestinal mucosa of a healthy animal, examined at once after death, does not contain microbes. Although they abound in the contents of the intestines they do not penetrate the epithelium nor into the glands. It is even rare to find them at the entrance to the glands, and this only occurs in the large intestine. Examined four hours later, and at intervals, the mucosa is still free from microbes. When found, they indicate pathologic conditions. In normal conditions the number of microbes in the contents of the intestines increases with the distance from the pylorus, while the cadaveric changes decrease in the same proportion, showing that the microbes are destroyed and the cadaveric changes produced, by the digestive secretions. The number of microbes is very much less after a fast of twenty-four hours. In this condition the small intestine, in accordance with the above law, is almost amicrobian. In enteritis produced in animals, with arsenious acid, the mucosa contains microbes, with the maximum in the large intestine, and they continue increasing after death. The fact was also noted that the microbes were less numerous two to four hours after death than immediately after or twenty-four hours later.

Different Forms of Paraplegia Produced by Compression of Spinal Cord. A. VAN GEHUCHTEN. Motor troubles appear first and persist to the end; first spasmodic paraplegia with exaggerated reflexes and no sensory disturbances; then the transition form of lax paraplegia with the reflexes exaggerated, normal or diminished; then the second degree of compression with lax paraplegia and the reflexes entirely abolished, which condition persists to the end. Sensory disturbances appear in the next transition form; decreased sensation of pain and heat, with muscle and tactile sensation normal. The following transition stage has the sensation of pain abolished; the other sensations normal. Then follows the third degree of compression with pain and thermic sensation abolished; the others normal. Complete anesthesia follows with the fourth and final stage of compression. The first stage, the spasmodic paraplegia and exaggerated reflexes, is caused by compression of the corticospinal and cerebello spinal fibers. As the compression increases and the paraplegia becomes lax and the reflexes abolished, it is evident that all the motor or descending fibers of the white matter have been interrupted, either anatomically or functionally. When the sensory troubles appear, they indicate by their character that the fibers of Gower's tract now feel the effect of the compression and that these fibers, of all the ascending fibers of the cord, are most readily affected by the traumatism. This is followed by loss of the muscle sensation [compression of the fibers of the cerebellar tract or of the posterior columns (?)]. Tactile sensation persists the longest [fibers of the posterior columns or of the cerebellar tract (?)]. The fibers of the posterior columns and of the cerebellar tract are therefore those which resist traumatism the longest, precisely the reverse of what occurs with syphilitic lesions. Besides these forms of paraplegia a few irregular, atypic cases have been recorded in literature, which proclaim the close relationship between them all, although explanation of their peculiar features must be left to future research.

Revue Hebd. de Laryngologie (Bordeaux), May 6.

Transportable Telephone for Detecting Simulated Unilateral Deaf-

ness. J. KALCIE.—The principle of Lawrence's stereoscope is applied to the ear in this little instrument, that is, the impossibility to distinguish between two impressions received at the same time. If a person speaks into each ear of a normal subject, the sound will be distinct only if each says the same words in unison. Otherwise only one or the other is understood, and probably, neither. The apparatus is in another room or behind a screen, and two persons speak into the receivers, one connected with each ear. As long as each speaks the same word together, the subject repeats it distinctly, but when each says a separate word, if he were really deaf he would still repeat one distinctly, only hearing one voice, but the blending of the two confuses him, and he frequently repeats the word heard in his assumed deaf ear. This test has never failed.

Semaine Medicale (Paris), May 10.

Have High Altitudes Therapeutic Value? R. LEPINE.—The new and interesting question propounded in this article, whether acclimation to altitudes of eight to ten thousand feet, has prophylactic or therapeutic utility, is left unanswered, for time and experience to decide. The value of altitudes of 4500 to 5400 feet has been established beyond question for certain cases of phthisis, also in most cases of anemia, but not for all, as chlorotic subjects may not bear even moderate altitudes. (Dunin has recently reported several cases of chlorosis returning from St. Moritz with more aggravated symptoms and only recovering under the influence of iron and rest in bed. The same is true of anemia consecutive to hemorrhage. Mountain climates are too stimulating and make too great demands on their strength.) Even comparatively low altitudes are also injurious for persons with emphysema and heart troubles. Lepine does not consider Mosso's "acapnia" an important factor in the disturbances caused by decreased atmospheric pressure. He attributes them to anoxemia and mechanic modifications in the circulation, such as the diminished negative pressure in the pleura. He warns against deducing conclusions from the effects of the pneumatic chamber, as this has only one of the features of mountain climate. The sunlight in elevated regions has more violet rays than below (Cornu), and the air is not only richer in ozone, but may vary still more in chemic composition at different heights. He also warns against comparing tropic and temperate zone altitudes.

Revue de Chirurgie (Paris), May 10.

Intestinal Occlusion by Meckel's Diverticulum. L. BERARD AND X. DELORS.—In the last twenty years over 100 cases of occlusion from this cause have been recorded. In 75 cases studied by the writers, 66 were males. As reported by various writers, a diverticulum has been noticed in 29 cases out of 1767 autopsies, which establishes its frequency as 1 in 55. As might be expected from a congenital anomaly, accidents occur most frequently from this cause in early life, the majority between 20 and 30. The immediate cause is something which temporarily increases the peristalsis, weight of the diverticulum or alters its position, stasis, retraction, torsion, possibly an indigestible meal, excess of beer or any fluid, some violent effort or the administration of a powerful purgative, or an electric lavement. A few cases have been observed in which the influence of heredity was prominent. The diverticulum may vary from 2 to 25 cm. in length, and may cause occlusion by invagination, torsion of the mesentery or intestine, or pulling, bending or crushing the intestine by a taut, adherent diverticulum knotting it into all kinds of shapes.

Ablation of the Gasserian Ganglion for Rebellious Facial Neuralgia. S. COELHO.—Pain, tactile, thermic, electric and stereognostic sensations are entirely abolished in the space between the vertex, the base of the chin, the ear, and the median line of the face. The masticating muscles do not contract and there was transient ulceration of the cornea on this side, vision confused, diplopia. Coelho considers the operation the last resort in the treatment of neuralgia of the trigeminus, and that it is dangerous on account of the possibility of injuring the internal carotid. Cerebral compression, shock and secondary infection have led to fatal results. The extirpation of the ganglion should be done by tearing out the trigeminus at the protuberance, to prevent recurrences, which can not be accomplished by extirpating the ganglion alone.

Centralblatt f. Chirurgie (Leipsic), May 13.

Prevention of Thrombosis in Lower Extremities After Operations Necessitating Long Rest in Bed. K. G. LENNANDER.—For a number of years Lennander has been in the habit of having the foot of the bed permanently raised from 10 to 50 cm. in cases with varicose veins, and he has now adopted the practice for all cases after laparotomies and operations for hernia, with most gratifying results. The aim is to produce an incline from the feet to the heart, thus accelerating the circulation, and this aim is not achieved by raising one limb alone. The pelvis must also be included in the slope. The elevation is about 10 cm. for comparatively healthy persons, increasing it for debilitated, anemic patients and those with varicose veins, to the maximum with anemia and feeble heart action, when he supplements it with salt solution and tonics. A soft, elastic bandage is applied to varicose enlargements. He even recommends the practice after childbirth and long illnesses.

Foreign Bodies in Male Bladder. R. TRAZEBICKY.—After reporting half a dozen cases in which a glass tube, a quill, a stick or a catheter inserted in the urethra had escaped into the bladder, the writer calls attention to the necessity of fastening a string to the free end of catheters, as the urethra and bladder in some cases actually seem to swallow up long smooth articles spontaneously.

Transfusion with Solutions of Sodium Saccharate. A SCHÜCKING.—Seeking to perfect the salt solution employed in transfusion, the author has found in the alkaline saccharates substances that bind the carbonic acid in the blood in the same manner as the alkaline combinations in the serum globulin, and hence produce an artificial serum which fulfils every condition. With the formula: 8 per 1000 salt; 0.33 per 1000 sodium saccharate and 0.03 to 0.15 per 1000 calcium saccharate, he succeeded in keeping an isolated frog heart "alive" for 140 hours, and the isolated heart of a turtle that had died a natural death, for twelve hours, among other conclusive tests. Finding, however, that this formula occasionally produced slight smarting, although its harmlessness was fully established by numerous personal and other tests, he now prefers for man the formula: 0.08 per cent. salt and 0.033 per cent. sodium saccharate, omitting the other ingredient, and reports observations demonstrating the marvelous efficacy of transfusion of even a small quantity of this perfected artificial serum.

Muenchener Med. Wochenschrift, May 9.

Anthrax of Tongue and Treatment of Anthrax Carbuncles.—RAMMSTEDT.—Professor v. Bramm of Halle considers all surgical intervention counterindicated in anthrax, as it opens the door to general infection. He has been very successful with ice, a stimulating diet, and alcoholics in a concentrated form, cleansing the surface with antiseptics; no incisions. The gangrene with this treatment remains circumscribed and recovery is prompt. He has a record of twelve cases thus successfully treated, some extremely severe.

Physiology of Organ of Hearing. G. ZIMMERMANN.—The writer claims that the facts observed to date have not been interpreted aright, and that the tympanum and the chain of ossicles undergo only molecular vibrations during transmission of the sound waves. The tympanum, ossicles and muscles form a remarkably delicate reflex regulating apparatus with the fenestra rotundum as an automatic valve. There is only one way in which the sounds are transmitted to the labyrinth, and that is by the bones. This may be direct or indirect through the medium of the column of air. The tympanum and ossicles are in almost complete repose during the transmission of ordinary sounds, as regards their position. "Treatment should be founded on different bases than those hitherto accepted, and will be found much more effective."

Autotransfusion in Prophylaxis and Cure of Tuberculosis. E. JACOBY.—The writer suggested, in 1897, that the reason why the apices of the lungs are the chosen seat of tuberculous lesions is owing to the insufficient circulation in them, from the effect of gravity on the blood, especially in rapidly-growing persons. He therefore proposed, as a prophylactic or curative measure, lying flat on the back for certain periods each day, to improve the circulation in the apices, in connection with fresh air cures, etc. He now reports the results of his own and others' experience which confirm the benefits to be derived from this "autotransfusion," as he calls it, but cautions that it is best to assume the flat position gradually and arise in the same way, and recommends a reclining chair for the purpose, constructed so that it can be graduated at any position, even with the head lower than the feet. Expectoration is favored and the subjects are relieved for hours after.

Gazzetta degli Ospedale e delle Cliniche (Milan), May 7.

Tuberculosis and Pregnancy. E. MARAGLIANO.—After reviewing our present knowledge in regard to the effect of pregnancy on tuberculosis, which he summarizes as a "distinctly pernicious influence," chiefly on account of the conditions which accompany the postpartum involution of the uterus, Maragliano continues: "The restoration of the circulation in the pulmonary tissues after months of profound modification, favors embolic accidents and the passage of toxic substances into the general circulation, resulting in hemoptysis, the formation of new tubercular foci and phenomena of general intoxication and congestion." As long ago as 1893 he asserted

that whenever a tuberculous focus is discovered with commencing pregnancy, the immediate interruption of the pregnancy is indicated. He reiterates this now in still stronger terms. When the pregnancy is advanced, the question of interrupting it must depend on the circumstances: If the tuberculosis is being aggravated by the course of the pregnancy, it should be interrupted, but if not, it is best to await a natural termination, as there is little material difference between the conditions of the eighth and ninth months. He concludes by expressing his satisfaction in the progress that has been realized since the days when the principle was to save the fetus at all costs, even at the expense of the mother. "To-day we affirm that the rights of the mother and of society, menaced by the birth of a new tuberculous being, are superior to those of the fetus."

Societies.

COMING MEETINGS.

AMERICAN MEDICAL ASSOCIATION, COLUMBUS, OHIO, JUNE 6-9.
American Medical Editors' Association, Columbus, Ohio, June 5.
Association of American Medical Colleges, Columbus, Ohio, June 5.
Indian Territory Medical Association, So. McAlester, June 20 and 21.
Maine Medical Association, Bangor, June 7.
Massachusetts Medical Society, Boston, June 13.
Medical Society of Delaware, Wilmington, June 13.
National Confederation State Medical Examining and Licensing Boards, Columbus, Ohio, June 5.
Oregon State Medical Society, Portland, June 13 and 14.

LaPorte County Medical Association.—At the recent session of this society, the following officers were elected: president, Horace Wardner; vice-president, John J. Kerrigan; secretary and treasurer, E. L. Annis.

Connecticut State Medical Society.—The one hundred and seventh annual meeting was held at Hartford, May 24 and 25. The election of officers resulted as follows: president, Charles S. Rodman of Waterbury; vice-president, L. B. Almy of Norwich; treasurer, W. W. Knight of Hartford.

Montana Medical Association.—The annual meeting of this association was held in Butte, May 18 and 19, and the following officers chosen for the ensuing year: president, J. W. Gunn, Butte; first vice-president, T. A. Grigg, Butte; second vice-president, W. C. Riddell, Helena; secretary, B. C. Brooke, Helena; treasurer, George H. Barber, Helena; corresponding secretary and historian, J. F. Spelman, Anaconda. The next meeting will also be held at Butte.

Louisiana State Medical Society.—This society held its twentieth annual meeting in New Orleans, May 16-18, the last evening being given up to a banquet tendered by the profession of New Orleans. The next meeting will be held April 19-21, in New Orleans. Officers were elected as follows: president, W. G. Owen; vice-presidents for the six Congressional districts in numeric order: Felix Formento, F. W. Parham, W. A. Holloway, T. E. Schumpert, J. B. Bonney, G. C. Mouton; recording secretary, Hermann B. Gessner; corresponding secretary, A. G. Friederichs; treasurer and librarian, H. S. Cocram.

Philadelphia College of Physicians.—The following correction is noted concerning Dr. Charles A. Oliver's paper on "Implantation of Glass Balls into Orbital Cavity." (See JOURNAL, April 29, p. 941.) The operation is a modification of that proposed by Frost and Morton, and, briefly, is as follows: The conjunctiva is dissected from the cornea as in ordinary enucleation, until the tendon of the recti muscles are in view; either of the lateral muscles is loosely secured to its antagonist by means of a long catgut suture introduced by means of a half-curved needle, in the same manner as the Kall stitch for corneal suturing; the vertical muscles are then treated in the same manner. This done, the tendons of the lateral muscles are freed from the globe, and their cut ends resected and brought together after the eyeball has been removed and the glass globe placed in position. The conjunctival wound is lengthened somewhat, then brought together by a series of silk sutures, thus enclosing the glass sphere within Tenon's capsule.

Medico-Legal Society.—At a dinner of the psychologic section of this medical society in New York City, recently, corporal punishment for crime was discussed, and nearly all who participated spoke in favor of the revival of the whipping-post for the punishment, in suitable cases, of certain crimes. The principal paper was by Judge Simeon E. Baldwin of Connecticut, who said: "I do not hesitate to avow my conviction that whipping would often furnish a mode of punishment for minor offenses, and a useful addition to imprisonment for graver ones. If we were to accept the sentimental or humanitarian position, that the right to punish rests on the duty to educate the ignorant, and reform the vicious, I should none the less insist that whipping was for many cases the best incentive to education and reform. He who has learned to refrain is half reformed, and a whipping has a very direct tendency to teach a man to refrain from whatever is likely to entail another punishment of the same sort." Among the other speakers was Frank Moss, counsel for the Mazet Legislation Committee, who said: "There is hardly anything reformatory about our prisons; their influence rather tends to the deepening of criminal impulses and the spreading of criminal influence. I have no doubt that whipping is a proper method of punishment for those offenses in which manhood is degraded. The perpetrators of wife-beating and cruelty to children could be flogged with benefit to themselves and with the approval of society."

Kentucky State Medical Society.*

Forty-fourth Annual Meeting.

(*Continued from page 1175.*)

PECULIARITIES OF HEART AFFECTION OF CHILDHOOD.

Dr. PHILIP F. BARBOUR of Louisville read a paper on this subject and mentioned the infrequency of inorganic and the frequency of organic lesions in children, also the association of endocarditis as a manifestion of rheumatism, with apparently trivial conditions, as growing pains, erythema, torticollis. In children heart murmurs are heard all over the chest, often best over the back; accentuation of pulmonary second sound is frequently found; heart occupies a more horizontal position in the child than in the adult, only approximates the adult heart at four years. Mitral insufficiency is the most frequent organic lesion in childhood. Exanthem and diphtheria often cause endocarditis, as well as rheumatism. In the treatment, iodids are not well borne by children, even iodid of iron, if given too long. Disappearance of endocarditic murmur is sometimes seen in childhood, and pericarditis as a complication frequently seen in pneumonia, empyema, pleurisy, rheumatism, and frequently unrecognized in life. The occurrence of fibrous adhesions of the walls of the pericardium is important to the well-being of the child. The compensation is easily perfected in the child, but if it does not exist hypertrophic dilatation and dropsies follow.

NORMAL SALT SOLUTION IN SURGERY.

Dr. JAMES B. BULLITT of Louisville, opened this discussion with a paper. This treatment was suggested to take the place of theoretic practice of direct transfusion of the blood itself, the assumption being fallacious that animals, even of the same species, can use blood-cells of another thus transfused. Milk and other albuminous materials were of old suggested; though mentioned as early as 1879 by the French, it did not get into general use until 1899, using 6 per cent. saline solution quite hot. It is useful in extreme hemorrhage, acting mechanically, extreme shock stimulating the heart; in faulty and insufficient excretion of kidneys, sepsis and drug toxin (the use in the latter not being well established), diabetic coma, purpura, carbon monoxid poisoning, burns, painter's colic, carbolic acid, and mushroom poisoning. Its physiologic action is to increase the volume of blood, lessen specific gravity, stimulate cardiac ganglia and arteries; it gives more nutritive blood to the coronary arteries, stimulates nerve-centers, unstriped muscular fibers of vessels, and stimulates all organs to more work, also hemostasis. It is used as hot as the hands can bear, from 110 to 120 degrees. It is introduced in several ways, intravenous, intra-arterial, in connective-tissue spaces, in rectum and colon, and abdominal cavity after laparotomy. Red blood-cells are supplied with remarkable rapidity after saline infusion. Plain

water is toxic, as it extracts hemoglobin from the blood and produces death. It is better to infuse small quantities and repeat, than to give large quantities at once.

Dr. AUGUST SCHACHNER of Louisville emphasized the importance of careful preparation of the solution, sterilizing by boiling for ten or fifteen minutes the first day, and for five minutes for three days afterward, as this method destroys the spores and germs. Water, distilled, or ordinary water, is used, if boiled in this way; flocculi form and there is danger of emboli. The technic of making the injection was referred to. The veins do not come up readily; in collapse from hemorrhage it is difficult to expose them. If the water is allowed to flow up against the vein it opens the opening made, and continuous flow of the saline prevents entrance of air into the vein.

Dr. J. A. LEWIS of Georgetown referred to the use of saline solution in non-surgical diseases, as in cerebrospinal meningitis. Treatment of this disease is acknowledged a failure, and he reiterated the point made in the discussion of that subject, to withdraw a pint of blood, inject the saline solution to take its place. The idea was original with the speaker, and he commended it as good theoretically. It stimulates the excretion as well as the whole system.

Dr. ARTHUR MCCORMACK of Bowling Green did not see the use of taking the precaution suggested by Dr. Schachner in regard to the preparation of the saline solution. He suggested that saline solution, extemporaneously prepared, gave just as good results.

Dr. J. H. LETCHER of Henderson had had considerable experience with its use, and as there was no practical danger from its use, he thought it would be oftener resorted to in practice. His preference was for the intercellular use, the most logical results being seen in profound shock. In this way time is saved, as it is difficult to find the vein.

Dr. W. C. DUGAN of Louisville stated that the use of saline solution is a most important life saving measure. For injection the submammary spaces are important places. He has not found trouble in the location of the vein; it is easily exposed, lifted up entirely, opened, needle introduced well in, the tension and volume of pulse being a guide to the amount of fluid used. We should not use too much, but repeat it if necessary. Slight introduction of air was not considered harmful by the speaker.

Dr. W. B. GOSSETT of Louisville referred to the use of the solution following childbirth, giving it in postpartum hemorrhage in the form of hot douches through the vagina and rectum. It is also of use in severe hemorrhage in placenta previa.

Dr. C. L. BONIFIELD of Cincinnati believes the saline solution the greatest life-saving agent introduced in years. Intravenous injection is simple. If too much time is taken to prepare the solution the patient will die. In country practice and private houses elaborate preparation can not be made. A patient will not be killed if the proper amount of salt is not used. The subcutaneous injection is not so prompt as venous; can give it first under the skin in profound collapse, and then go for the vein. Obstruct the circulation in the vein and it stands out and requires no complicated apparatus. An artery forceps is best pushed under the vein, a catgut loop passed under to hold it up, an opening made, while the glass point of a medicine-dropper and fountain syringe complete the armamentarium necessary. There is no danger in using too much water at one time if the pulse is observed and there is not too much pressure. He has often used two quarts. It is not necessary to use the vein a second time, but one can resort to the rectum, as it absorbs saline solution readily.

Dr. R. C. MCCHORD of Lebanon believes that the intravenous injection of water without salt is often fatal, Dawbarn's experiments in that line proving this important point. If there is severe hemorrhage, time is of material consequence, and intracellular infusion should be used first.

Dr. EDWARD SPEIDEL of Louisville suggested an apparatus all ready in the form of a four-ounce glass bottle, two feet of rubber tubing and aspirating needle pushed in tube, all sterilized at home and wrapped in a towel. He believes the best locality is in the right or left hypochondriac region in the abdominal wall as, if given in the interscapular region, an abscess following, after-treatment would be difficult on account of the position.

Dr. B. F. PARRISH of Midway suggested that there is no reason for carrying any apparatus, as the fountain syringe is always at hand, and every physician has a hypodermic needle, which was all that was needed. There is no excuse for failure to use it for lack of apparatus.

Dr. BULLITT, in closing the discussion, stated that simple water will not suffice, as it acts as a poison when injected into the blood; 6 per cent. is non-toxic, ordinary water almost non-toxic, distilled water quite toxic. Preparation of the fluid is a simple affair. It is important that the surgeon and physician should know its many uses. If in a hospital, the solution can be gotten ready; the ideal way of sterilizing is for it to be repeated for three days, but it is not essential. Prepare it in double strength, and add hot water for dilution. The apparatus used in making the infusion should be sterile, and this is easily accomplished if boiled, the domestic teapot being one of the best vessels to use; the basin is not surgically clean. Everything should be boiled before using.

PERITONITIS FROM SURGICAL STANDPOINT.

Dr. AUGUST SHACHNER of Louisville read this paper. He classifies according to causation and pathology; the former as primary, secondary and specific; the latter toxic, the patient dying in forty-eight hours in shock; hemorrhagic, with great virulence also. Fibropurulent, a slower process and purulent, there being much pus present and flocculent matter; cause of death is interference of the ebb and flow of serum in the peritoneum; currents move toward diaphragm. The absorbing capacity of the peritoneum is great. Prophylaxis is the first element in treatment, both before and during operation; post-operative peritonitis is the most virulent we can have. The best guides as to progress are distension and alteration in the face, as well as pulse; face shows anxiety, not pain.

Exclude infection, preserve the integrity of the peritoneum during the operation and afterward. Operate before the patient is *in extremis*, express prognosis early. Any percentage of recoveries, no matter how low, is a credit to surgery. It is not what is to be done, but how? Some favor large incision, evisceration and washing; others, washing without evisceration; others remove the deposit of fibrin covering the intestine, some say it opens new avenues of infection; others advise mopping the intestine. A good method is injection of sulphate of magnesia into the cavity; may anchor knuckle of gut to abdominal incision as also of value.

CLOSURE OF ABDOMINAL WOUND AFTER LAPAROTONY.

Dr. ARTHUR MCCORMACK of Bowling Green presented this paper, which will appear in full in the JOURNAL.

WHAT CAN WE DO FOR THE CHRONIC INVALID.

Dr. CURRAN POPE'S paper was a discussion of neurasthenia. He mentioned as causes: 1, heredity, mental disease in one generation producing nervous disease of this character in the next; 2, lithic diathesis, producing gastric and vasomotor types; 3, overwork, but few cases being thus produced, unless with worry and overstrain and the use of alcohol. In the treatment moral control and discipline were mentioned, with dietetics, water, rest—full rest being applicable to but few cases; exercise and symptomatic treatment, with laxatives, cascara in pill form being the best; bromids, nux vomica and arsenic. He laid stress on the fact that there was no medicine in the treatment of neurasthenia which would of itself cure the patient. The effect of pepsins, pancreatins are *nil*. Use no alcohol for the flagging appetite. He condemns travel and climate as of no benefit, valuable time being wasted, chronicity being induced and recovery postponed.

The president, Dr. DAVID BARROW, delivered the president's annual address, taking for his subject "Rest and Exercise," which was followed by a brilliant popular address by the Rev. Carter Helm Hones of Louisville, which was received with much enthusiam.

SECOND DAY.

Dr. HENRY E. TULEY, chairman of the committee on constitution and by-laws read the proposed change in the constitution suggested by the president in 1898 and reported by the special committee appointed by him. The change has to do with the appointment of delegates by the county societies of the State to the State society, membership in the latter being dependent on the membership in a county society.

The treasurer made his annual report, and in it a suggestion that the nominating committee combine the offices of secretary and treasurer, as it is the secretary who must needs do the correspondence in the collection of dues between the annual meetings. On motion of Dr. Tuley this suggestion was referred to the nominating committee. A balance of $24.00 was reported in the treasury.

Dr. C. B. GRAHAM of Henderson presented a resolution passed by the local medical society of that place for endorsement by the State society. This resolution condemned the action of the Fiscal Court in refusing to approve the bills for expenses incurred in stamping out and controlling an epidemic of smallpox now prevalent in Henderson, and commending the physicians of the county and city boards of health for refusing to serve under the jurisdiction of the court, they having referred to the members of these boards in severe terms.

On motion of Dr. J. N. McCORMACK, the resolution was unanimously endorsed by a rising vote.

(To be continued.)

Illinois State Medical Society.

Abstract of Proceedings, Forty-ninth Annual Meeting, held at Cairo, May 16, 17, and 18, 1899.

(Continued from page 1174.)

COMPLETE PROLAPSE OF OVARIAN TUMOR THROUGH ANUS.

Dr. J. A. BAUGHMAN of Neoga reported this case in a woman 40 years of age, weighing 120 pounds, and who had passed the menopause. The prolapse of the rectum was to the extent of five inches. Careful examination showed that a hard round tumor about the size of a black walnut lay in the dilated cul-de-sac of Douglas. An abdominal operation proved that this mass was an ovarian tumor.

CAPUT OBSTIPUM MUSCULARE.

Dr. M. L. HARRIS of Chicago presented this paper. He said that this condition is not congenital in the sense of having an intrauterine origin. The primary factor in the etiology is a trauma to the sternomastoid muscle during labor or shortly thereafter. The secondary factor is a hematogenous infection. As far as the pathology is concerned, it is an interstitial myositis, usually chronic and progressive. The changes are not limited to the muscle per se, but involve the sheath and neighboring structures. As regards the treatment, simple myotomy is seldom sufficient; myectomy with the removal of the sheath and the surrounding insular tissue is essential to obtain perfect results. The operation must be supplemented by orthopedics.

FOUR HUNDRED HERNIOTOMIES BY THE IMBRICATION METHOD.

Dr. E. WYLLYS ANDREWS of Chicago detailed this method, which is familiar to surgeons. He imbricates or overlaps the aponeurotic layers, producing a double thickness of the wall behind the cord. The lower flap of external oblique aponeurosis is imbricated upward to form a new anterior wall of the canal in front of the cord. The posterior wall is often very deficient. The Bassini operation needs supplementing in the large internal rings. Flaps of various kinds have been suggested. The author's imbrication operation is a true flap method, without serious displacement of the structures. A new strong layer is incorporated behind the cord; the obliquity of the canal is preserved. The canal may be lengthened or not as desired. Dr. Andrews reported 300 cases of his own operated on by this method, and also mentioned 100 cases by other surgeons who have performed this operation.

USE OF SCHLEICH'S MIXTURE FOR GENERAL ANESTHESIA IN ONE HUNDRED AND TEN OPERATIONS IN THE NOSE AND THROAT.

Dr. W. K. MCLAUGHLIN of Jacksonville read a paper on this subject. This method of anesthesia is very rapid, and the usual period of excitement entirely absent. Although no attention was paid to abstinence from food prior to the operation, there was comparatively little disturbance of the stomach; no sequelæ such as bronchitis or bronchopneumonia. There is a rapid return to consciousness and control of the mental faculties, which is especially desired in operations in the nose and throat where sudden and copious hemorrhages are so liable to be encountered. There is no increased secretion of mucus in the respiratory tract. The tension of the pulse is increased. The patient becomes unconscious as naturally as one falls asleep, and in from two to five minutes as rapidly becomes conscious. Universally all described the sensation as one of sweet dreams, no odium being associated with the operation because of the anesthetic. Finally, these mixtures are, when properly administered, safe, especially in short operations.

ADIPOSE TISSUE AS AN ETIOLOGIC FACTOR IN HERNIA.

Dr. ALEXANDER HUGH FERGUSON of Chicago contributed this paper. The evidence which proves adipose tissue to be a causative factor of hernia is: 1. Its physical properties; its tendency to accumulate in spaces and cavities and then to descend. 2. Its locality and frequent accompaniment of hernia. 3. Its association with the development of certain forms of rupture, the fatty mass forming first and the true rupture following. Small lipomata form in the openings where hernia is most liable to occur, and by intra-abdominal pressure atrophy of the rings occurs. They thin out and weaken and become enlarged, and then the ball of slippery fat urged out by the *vis a tergo* protrudes more and more, and drags the elastic peritoneum with it. If, however, the abdominal wall had no congenital deficiencies in the structures protecting the normal rings, a hernia would be rare indeed, and no accumulation of fat would be liable to take place.

SURGICAL TREATMENT OF HEMORRHAGE FROM GASTRIC ULCERS, WITH REPORTS OF TWO CASES AND ANIMAL EXPERIMENTS.

Drs. E. WYLLYS ANDREWS and DANIEL N. EISENDRATH of Chicago contributed this paper. The following conclusions were drawn:

1. The result of the practice of the best modern surgeons warrants the statement that only operative interference can save the lives of a part of the patients affected with bleeding ulcers of the stomach, namely, those not improved by internal medication.

2. Surgical intervention is to be recommended: *a*, in small repeated hemorrhages; *b*, in severe ones occurring more than once, especially if more than five hundred cubic centimeters is lost at each hematemesis.

3. A single copious hemorrhage is not necessarily an indication for operation.

4. In the ulcers at or near the pylorus, pyloroplasty (Heineke-Mikulicz) is ideal. It makes local treatment possible and gives all the benefits of gastro-enterostomy, and is safer.

5. Cauterization and curetting of the ulcer should give place to resection wherever the stomach wall can be reached from without.

6. If adherent posteriorly and at the ends of the stomach, cauterization, curettement and ligature en masse are best substitutes for excision.

7. Ligature en masse is shown by the experiments to endanger perforation, except when supported by external sutures.

MOVABLE KIDNEY.

Dr. A. E. HALSTEAD of Chicago discussed this subject. He first considered the normal topographic anatomy of the kidneys, then spoke of the position of the kidneys, their relations, means of fixation and their normal mobility. He then dwelt upon the pathogenesis of movable kidney, a knowledge of which is necessary to a proper appreciation of the surgical treatment. He briefly reviewed the most generally accepted theories of origin, among which are anatomic peculiarities or defects of the natural supports of the kidney; a general relaxation or weakening of all the so-called abdominal ligaments; the effect of prolapse of the female organs of generation, pendulous abdomen; rapid absorption of fat; menstruation; improper clothing and injuries.

Under the head of symptomatology he briefly considered those symptoms referable to the nervous system and digestive organs, changes in the secretion of urine, and the symptoms of acute incarceration of the kidney. He pointed out the indications for and contraindications against operation. He mentioned the complicated and uncomplicated cases, and described the methods of operating.

ADRENAL TUMORS OF THE KIDNEY.

Dr. BAYARD HOLMES of Chicago read a paper on this subject. He said that Grawitz had described a group of tumors of the kidney resembling adrenal tissue, which he believed to grow from fragments of adrenal tissue left in the kidney from the earliest embryonal period. Since that time these tumors have been more or less generally recognized. They appear: 1, as masses troublesome only on account of their size, or on account of their tendency to metastasis in the lungs and bones; 2, as sources of adrenal intoxication, producing a complexus of symptoms diametrically opposite to those of Addison's disease, and parallel with the intoxication produced by hypertrophy of the thyroid observed in exophthalmic goiter. The cases presented by Dr. Holmes illustrated both of these manifestations of the disease.

TRAUMATIC RUPTURE OF URETHRA.

Dr. E. J. SENN of Chicago presented this paper and mentioned the classifications of Onax Oberst and Terrillon. In speaking of the etiology, he referred to the theories of Terrillon, Ollier and Poncet, and then discussed the pathology, symptoms, differential diagnosis and treatment of these urethral ruptures.

GALL-BLADDER SURGERY.

Dr. J. E. ALLABEN of Rockford read a paper in which he reported cases in gall-bladder surgery and dwelt upon the sequelæ. He made some introductory remarks on the difference of opinion in the profession as to the treatment of medical and surgical cases and made a plea for more harmonious action. The paper reiterated the claim of its author, made in an article in the *North American Medical Review* of October, 1897, that the gall-bladder has no function whatever, and that it is merely a sort of diverticulum or a rudimentary organ like the appendix vermiformis.

Case 1.—In this case of empyema of the gall-bladder, operation was followed by recovery. A second operation (cholecystectomy) was done two years later for a mucous fistula, there

being occlusion of the common duct, and a stone was found in a pocket of the gall-bladder. Recovery.

Case 2.—Cholelithiasis. Cholecystenterostomy with the Murphy button was performed, with recovery. A laparotomy was done two years later for hernia, which contained omentum, ascending colon, and coils of small intestines. Recovery.

Case 3.—In this case he resorted to cholecystenterostomy with the Murphy button. Recovery. A laparotomy was done four months later; the button was found lodged at the pylorus and was removed by an incision in the intestine.

Case 4.—Cholecystitis with peritoneal adhesions. A cholecystostomy was done and the gall-bladder drained. There was a return of the trouble after drainage was discontinued. Daily lavage of the stomach was given for two weeks. Recovery.

Case 5.—Obstruction of the common bile-duct by a ball-valve action of the stones. A cholecystostomy was done and the stones removed. Recovery.

Case 6.—Cholelithiasis. Operation was declined in this case and the patient died shortly after. Autopsy revealed empyema of the gall-bladder, two stones of great size, and extensive carcinoma occluding the common bile-duct and involving the liver and stomach by adhesions. The author exhibited these stones and photographs.

OPERATIVE TREATMENT OF EXOPHTHALMIC GOITER.

Dr. CARL DOEPFNER of Chicago read this paper. He stated that the physiologic pathology of this disease is not yet known. The most prevalent hypotheses are and have been: 1, dyscrasia of the blood; 2, neurosis of the heart; 3, alteration of the sympathetic nerve; 4, lesions in the medulla oblongata; 5, primary disease of the thyroid gland. The followers of the first, third and fifth of these theories resorted to surgical measures, such as bleeding, injections of different chemic solutions into the goiter, setons, galvanopuncture, cauterization, and other minor operations. Since 1880 we have had strumectomy, ligation of the thyroid arteries, enucleation, partial extirpation, and exothyreopesia. The year 1896 gave from different operators section of the sympathetic nerve (uni- and bilateral) and resection of the sympathetic nerve, unilateral and bilateral.

As the physiologic pathology of exophthalmic goiter is not yet known, the author takes the stand that there is no reason why surgical treatment of this disease should not be tried. There is no reason either why exophthalmic goiter should not be treated first by scientific internal methods. The patient who does not improve under the prolonged care of a reliable physician should be subjected to operation. Partial excision of the thyroid gland should be done in the first place and always where there is dislocation and compression of the trachea. This is in connection with the surgical indication for thyroidectomy in struma cases. The writer, without adhering to any lofty theories, performs, first, the partial excision of the struma, if possible, of the dislocating or compressing part of the gland.

WHY AND WHEN OPERATE FOR APPENDICITIS.

Dr. W. F. GRINSTEAD of Cairo, in his paper drew the following conclusions:

1. If catarrhal appendicitis can be diagnosed and the acute symptoms begin to subside by the third or fourth day, without tumor or board-like hardness remaining, it should be treated medicinally.

2. If a recurrence, with the same train of symptoms, takes place, it should be treated medicinally, but an operation strongly urged in the interval of health immediately succeeding.

3. If about the third or fourth day there is no improvement of symptoms, it is reasonably certain that they will grow worse and an operation should not be deferred.

4. If at the beginning of an attack perforative appendicitis can be diagnosed, having followed a train of trivial symptoms which the patient has disregarded, an operation should be advised at once.

5. If severe symptoms subside about the third or fourth day and the patient appears convalescent, except a circumscribed induration in the cecal region, it is safe to conclude that we have a localized peritonitis from perforation; that abscess or diffuse septic peritonitis must follow. We should advise laparotomy.

TWO AFFECTIONS OF THE KNEE JOINT—GONORRHEAL SYNOVITIS AND LOOSE BODIES IN THE JOINT.

DR. GEORGE N. KREIDER of Springfield read this paper Gonorrheal invasion of this joint is not uncommon, but frequently overlooked. When the knee-joint is alone involved, the possibility of this character of disease should always be considered. He then dwelt on the pathology, treatment and results. Loose body in the joint should always be looked for in obscure disease of this joint. He has treated several of these cases which had previously been confined to bed for months and subjected to various tortures by competent practitioners without benefit. He then described the methods of detection and the removal of these bodies.

(To be continued.)

Physicians' Club of Chicago.

Regular Meeting held March 27, 1899.

(Concluded from page 1177.)

WHAT WOULD PROFESSIONAL ETIQUETTE DEMAND?

Dr. JOHN RIDLON—Professional etiquette in hospitals should be very much the same as out of hospitals. When the profession comes to the point where they are willing to accept the Golden Rule as a good working proposition, there will be no occasion for any such discussion as this to-night. As a matter of fact, we have not reached that point. Too frequently, on the part of members of the profession, it is "dog eat dog." There are two sides to this question. One is the relation of the doctor to the other doctor, with the patient intervening. The second aspect is the relation of one doctor to the other, with the hospital management intervening. It depends entirely on one's own position in the fight as to which way the right appears. It appears to us that we are always in the right, and that the other fellow is always in the wrong. You have had a patient taken to the hospital perhaps, or one that you are very much interested in. You may have started a certain line of treatment which you believe to be the only right treatment. Your service ends; your colleague comes in, and he changes the treatment entirely, which is tantamount to saying that your treatment has been wholly wrong, whether the opinion is expressed in so many words or not. You feel that the colleague who has succeeded you has treated you very unfairly; that he has tried to do you harm. Let us change the position. You succeed your colleague, and find that a patient, in your judgment, has been treated wholly wrong; you believe that your colleague, especially if it is in a specialty, is wholly incompetent; that he does not know anything about his specialty; that he has been appointed either by political or social influences, or by monetary influences, by wire-pulling, by any possible means; that he does not know any more about treating a case of gynecology than I know about treating a case of ophthalmology. He happened to be put in that department because it was the only vacant place. You treat the case as you think it should be treated with credit to yourself, and your colleague thinks you have been trying to do him up. Both men may be honest; both men may be dishonest. Where is the chief obligation? Is it your duty, when you are the first man, to cover up the faults of the second man and not to squirm and not object to being placed in the wrong from the patient's standpoint? If you are in the second place, you must continue his incompetent treatment so as to save him? Must you sacrifice the patient, your professional standing, by treating a case wrongly, or continuing your colleague's treatment when you do not think he is in the right? Personally, the patient has the chief right; the patient must be considered before my reputation or that of my colleague. I will admit that my remarks do not agree with some of those you have heard to-night, but I honestly believe in the rectitude of my position.

The other proposition is where two members of the staff come in conflict with the authorities in management. When such a conflict occurs, the hospital authorities may make a vacancy in order to put in a man who needs the place. There are frequently such circumstances. You do not like to admit it, I know. How do they proceed to get that place? Do the hospital authorities go to that man whom they want out, and say, "We don't want you any more; get out"? They do not do that, but they go to the executive committee of the medical board and say: "Rumors have come to us that a certain member of the staff is not quite up to our own standard; investigate, and report to us." And this committee are so carried away with the thought of "eating dog," they proceed to investigate this man, when they had nothing to do with his appointment. They make their report, and they have acted as executioners of that man's reputation, and he goes. Shall we continue to act as executioners for hospital boards? I guess we will. Why? Simply because we are lacking in sufficient courage to risk our hospital appointments. We have not a sufficiently high degree of professional etiquette. We have not yet risen to the standard of blacksmiths or journeymen tailors in our standard of etiquette. If we do not do as we are told by boards of managers, we have to go, and we know there are three thousand men in Chicago who are ready to fight one

another for our places. We have not the courage we ought to have; we are slaves of the hospital, and we do the hospital's bidding.

The essence of professional etiquette appears to me to be to mind your own business; if you mind your own business, you will not have such trouble as you are having to-day. If you do not interfere with things that are not your affairs, you will not have so much trouble. If you leave other doctor's patients alone, you will not come into serious conflict with those doctors. Stop commenting unfavorably in the presence of the house staff and censuring the work of your colleagues in the presence of the nurses. Mind your own business, and when the board of managers asks you to be executioners of one of your colleagues, say to that board of managers, we had nothing to do with the appointment of this man, therefore we will have nothing to do with his execution.

The whole difficulty, it seems to me, lies in the manner of hospital appointments, and the whole remedy lies in changing the manner of making the hospital appointments.

Men are now appointed on the staffs of hospitals for two reasons. In some hospitals they are appointed because the hospital authorities think they will bring revenue and private patients to the hospitals. But generally they are appointed because *they* think they are needed on the hospital staff. The existing staff do not think they are needed; they know that they have already a great many more men than they need. But Dr. So-and-so wants to get on the staff, and he moves heaven and earth to get there. He uses every political pull. He may resort to the most disreputable tactics, and give anything and everything that is desired by the politician in order to get an appointment. He uses all the influence he can socially; he uses all the influence he can in the church. He goes to every man whom he knows on the staff and privately asks them to support his candidacy, and generally they have not the courage or nerve to say that they can not support his candidacy. They say, "Yes, we will support you," and he gets in. What sort of opinion will the board of managers have of a man who gets his position in that way? They do not have a very high opinion of him, because most of them who are on the boards of managers of our hospitals are business men, and they think that a man who asks the privilege of working without pay is either a fool or a knave. If we would not seek hospital positions so earnestly, if we would wait until the hospitals wanted us, and if we are ready to go out when the hospital does not want us, and when our colleagues do not want us, we would save ouselves a lot of trouble. How can it be brought about? Would it not be possible for the profession in Chicago to bring enough influence to bear to induce the hospitals of Chicago to let the profession appoint the attending staff in the hospitals? This surely could be brought about if the profession of the city would unite in this regard.

Dr. WILLIAM H. BAUM—There can be no question as to the attitude which should be assumed by medical men toward their brethren in the profession. As Dr. Ridlon has said, the object to be striven for is that we should all do unto others as we would expect others to do unto us. The proceeding of covering or making public the mistakes of a brother practitioner sometimes leads into error in many ways. In the first place, in order to properly appreciate the position of the practitioner at the time that the mistake is supposed to have been made, we should be in a position to see the patient and investigate before jumping to a conclusion. It has happened to almost every one here to have seen a patient at a date far remote from the time the first practitioner had an opportunity to make his examination, and what may have been obscure at first becomes apparent later. There is no way at present by which we can make a definite diagnosis of typhoid during the first, second or third day; it is only when the typic signs of the disease are present that a proper diagnosis can be made. The same is true of surgical procedures. Unless we are conversant with the conditions present at the time of the operation every practitioner must admit that it is difficult to pass judgment, and every physician should have the right to defend whatever course he pursues if there is a condition present which justifies his method of procedure, and it is the duty of the profession to uphold that individual in every possible manner and shield him from public criticism. The public expects a higher grade of honor among medical men in their relations to each other than it does among business men, and we should carry out their expectations by protecting each other against unjust criticisms. Since the law requires but ordinary care and diligence from the physician, the profession should at least do this justice to its members.

RELATION OF EXECUTIVE BODY TO STAFF.

Dr. THOS. A. DAVIS—I am quite familiar with the relations existing between the executive body of the Cook County Hospital and attending staff, and have been for years, and these relations have uniformly been very pleasant. The prevailing ethics between the executive, the Board of Cook County Commissioners, represented in the hospital by a layman as warden, and the medical staff of the hospital, is precisely that which exists between any political appointor and appointee. The executive of Cook County Hospital has always established such a prudent policy toward the medical staff of the institution that there has always obtained the fullest degree of happiness for both bodies, the executive and the staff. And again, the medical staff is given the function of regulating and carrying on the entire medical work of the institution, and, so far as I know, its policy has not been disturbed by the executive body. The medical staff prescribes its own policy and regulates its own ethics without the intervention of the executive body. We are placed under no restraint whatever. There is no limitation to our freedom. It is only when we can not obtain the moral sociability of ethics among ourselves that we must appeal to the executive department of the institution.

GENERAL DISCUSSION.

Dr. CHARLES S. BACON—Further light might be thrown on the subject of Dr. Stubbs by a consideration of a related subject, "How should members of the profession treat the mistakes of irregular practitioners?" This is not only a practical question, but has an important bearing on professional ethics. Both as members of hospital staffs and as practitioners we have to do with men who do not belong to the regular medical profession, such as homeopaths, eclectics, osteopaths, and others who may have graduated from regular medical schools, but have lost their standing by the employment of quackish methods. Shall we cover up their mistakes? I do not speak of deceptions. Of course, we would expose their humbuggery. But they may be honest men, and yet make mistakes. Now, if we ask the question, "Where shall the line be drawn to separate the practitioners whose mistakes we are going to cover up from those whose mistakes we expose?" the relation between the ethic rules which should govern members of the profession in their dealings with one another, and those to govern them in their dealings with outsiders, becomes apparent. Shall this line be drawn by a medical board, by a medical society, or by each one for himself? It is a well-known fact that there are many physicians whose names in our directories are followed by an "R," who belong to our medical societies, or who are connected with our hospital staffs, who are not as honest and competent as many of the irregular practitioners. Suppose we know that a man is dishonest or grossly incompetent, although he has succeeded in getting enrolled among the regulars. I should think that we might sometimes feel obliged to put such a case outside of the favored category, just as we often include among those whom we protect honest homeopaths and eclectics. In other words, each must make his own classification of regular or honest and irregular or dishonest practitioners. The honest practitioner deserves the same charitable judgment that we would ask for ourselves. The dishonest man, whether he be nominally a regular or irregular, merits our condemnation when either his ignorance or humbuggery leads to the commission of grave blunders. Only with such a limitation as this can we accept the rules laid down by Dr. Stubbs.

Dr. WILLIAM E. MORGAN—I do not feel like saying much about medical ethics; I might say a few words regarding the treatment of our brother practitioners, not only the honest, but the dishonest, the quack and irregular, and as to whether a quack, admitted to the regular profession, should be recognized by the profession as a regular practitioner. I refer to the advertising or newspaper quack, and I put them all in the same box, whether they are admittedly members of the regular profession or not. Should we criticize those men to our patients? This is a question which is rather undecided. The open, advertising quack or irregular practitioner is a conscientious sort of animal. We talk against him among ourselves as much as we please, but it is questionable whether we do the profession any good by talking about him to our patients. The laity do not look upon us as a profession as we do; we live in a society amongst ourselves. The laity look at doctors at large as all belonging to one general class of men. People have been fooled by the regular just as they have been by the quack; they have been deceived time and again by the regular as well as by the charlatan, and consequently the quack flourishes. It is a question in my mind whether we had not better keep still concerning the irregular practitioner to our patients. Let us talk about him as we will amongst ourselves.

As to the attitude we should show toward our brothers in cases of mistakes, I do not think that any physician should measure the conduct or act as a critic of his brother practi-

tioner, whether asked to do so by the executive committees of institutions made up of members of the laity, or committees made up perhaps largely of the trustees of churches or of politicians. I do not think it is our duty to yield to any of their demands to criticize our professional brethren. We should fight to cover up the mistakes of the regular medical profession; just as Dr. Stubbs has said, we should be charitable, because we are all fallible. I have made mistakes; all of you have made mistakes, and many a man could have ruined our reputations in the community. I do not think it is hard to cover up the mistakes made in regard to patients. When I am called in consultation to see a case, and have perhaps discovered something that a brother practitioner has not found, I have little difficulty in pleasing the patient, so that the regular family physician, or the man who has been in attendance before, is retained. This is especially the case with the young practitioner, the young man who is struggling for existence in the community. I am afraid we sometimes forget ourselves in dealing with the younger members of the profession, and in our forgetfulness we override them occasionally. It is not the intention of the older practitioner to do the younger member of the profession any harm, but in a moment of thoughtlessness he may do him an immense amount of harm. I do not think it is really necessary to deceive patients in these matters and lie to them; but matters can be smoothed over in a nice sort of way, so that patients will feel kindly toward the man with whom they are already waiting to find fault. The laity is very easily led into side channels. If we treat the younger members of the profession in a kindly way, it leads them to afterward do likewise toward their fellow-practitioners. Charity in the medical profession ought to be paramount, especially toward our fellow-practitioners.

Dr. B. MEYER—As a physician graduated from an European university, where medical ethics and professional etiquette are thought of so much, that though one can become an M.D. he will not be considered a gentleman without knowing all about and also practicing it, is somewhat surprising to me to listen to a discussion such as this to-night, not because the subject, hospital ethics, is unfit for discussion—on the contrary, it is a very good one, but because, if I am not mistaken, it has been deemed necessary on account of an occurrence which recently happened in Cook County Hospital, of which I read in the newspapers. I don't hesitate to state that anything like that could not have taken place in a hospital in Europe—at least, I never heard of one; and being in this country fifteen years, and knowing very well that America has at the present time as many gentlemen in the medical profession as has Europe, I have a right to be surprised. We must all agree that delicate professional matters should be kept strictly within the profession; what have the daily papers to do with them? It can not be doubted that every man who tries to ruin his fellowmen by climbing on their shoulders will suffer sooner or later, and how a physician can be benefited by pointing out to the laity the mistakes of brother practitioners is more than I can understand. Practice of this kind tends to lower the dignity of the whole profession, of which he is a member himself, and even the most ignorant of our patients, with only one grain of common sense and self-respect, will admit that it is wrong and can do nothing but harm. I agree with the gentleman (Dr. Ridlon) who said that the patient has the first right, but although I never had much sympathy for the cause of death, "professional courtesy," I do not think we have a right to overlook the interests of our profession. Should we find mistakes made, let us cover them as well as possible; that is our duty toward our profession, our fellow-practitioners, ourselves, and, I will add, toward our patients as well.

In regard to public charity hospitals, for I have watched the workings and movements of hospitals for a number of years, and not being attached to any hospital staff, I am more free to criticize, and must include our medical colleges and free dispensaries in the same category. They practice a sort of "confidence" on the medical profession, students, and a sympathetic public. The colleges do an injustice to our young men whom they graduate and send out into the active competition of the world, by bringing before their classes and clinics charity patients, who are well able to pay a reasonable fee, and doing the work gratuitously.

The young, active, ambitious and competent physicians work up cases and prepare to operate or give general treatment, when without due professional notice the patient hies himself or herself to a hospital and gets treatment, or an operation, free, without a dollar's expense to themselves, when a fee had been agreed on, and the patient was able to pay. The doctor has been "confidenced" out of his patient, the hospital has been imposed on, and a charitable public has been wronged. This is all wrong. The public gives to hospitals for charitable purposes, not to give gratuitous medical and surgical services, board and nursing to those who are able to pay. The public have a right to complain, because they are asked in various ways every year for the support of such institutions for charity, and not to make mendicants out of those who are able to remunerate for services rendered. I will mention one or two cases in point: Within a hundred miles of this city, a practitioner in good standing, competent and skilful, expected to operate on a woman whose husband was a well-to do farmer. The fee was to be $100. A few days before the date for operating she was taken to our city, placed in one of our best public hospitals, had the operation performed by one of our leading surgeons, services rendered, nursing and board, for how much, think you? Why, for nothing; not a dollar expense to the well-to-do farmer. The actual cost to the hospital was about $1.50 per day for thirty days. The general public had to pay the bill, with your and my assistance, and the physician who has spent time and money and long experience to obtain the requisite knowledge to perform such operations is "bunkoed" out of his honorarium, and worse than that, he is brought into discredit in his neighborhood as not being able to render such services.

Another young physician in one of our suburbs worked up a case for operation, a price agreed on, $50, nurses engaged, when off flies the object of his solicitude to a liberal hospital, and has all done for not even "thank you." The young physician was euchred out of his fee, patient and prospective reputation, which was to have amounted to far more than the paltry fee; a charity-giving public wronged, and the hospital again imposed upon, and hatred and disgust engendered in the hearts of the doctor and his brother friends against the course pursued by said hospital.

The aforesaid parties were able and willing and expected to pay a fee. Now, who is to blame for such a state of affairs? Physicians as well as the public have a right to complain because some of the parties connected with our hospitals are going about the community asking the charitable for funds for charity purposes, then turn around and give charity (?) where it is not deserved and not required. I could relate many more such cases, if time would permit. We sometimes complain of unions among laboring men; better assist them. I think we had better have one of our own to stop certain forms of unprofessional etiquette and from being confidenced out of our legitimate patients by the so-called public charity hospitals. The managers of hospitals are not particular enough in making inquiries and examining cases coming to them for charity as to their financial ability to compensate for services. Our clinics and our public dispensaries are largely a public curse, for the reason that many cases are treated free who could well afford to pay a reasonable fee. Many a patient who has the appearance of being poverty-stricken has a bank account. It is near time that the regular practitioners, whether they be allopaths or homeopaths, if they are honest men doing an honest business, should try to put a stop to this kind of proceeding. Physicians, how long are you going to stand this imposition and outrage?

Dr. JOHN RIDLON—I want to relate a personal experience in connection with the remarks made by the last speaker. A young man with clubfoot gathered together $125 to have the foot straightened. He was ready to spend that amount. He came to my office; we talked the matter over, and he agreed to pay $50 for the operation, and $75 for his hospital expenses. He was sent to a hospital, but was delayed a little in going there. During this delay two wealthy ladies, well known in this city, brought their influence to bear on the board of managers, and he was sent to the hospital as a charity case. Under the rules of the hospital I am not permitted to receive one cent as a fee for a charity case. He remained there five or six weeks longer than necessary; the hospital was beaten out of the board and nursing by the kindly ladies, and the hospital, by its arbitrary rule, deprived me of my fee, and the young man was $125 ahead. Why did I not object? I did not dare to. There are lots of other fellows ever ready to take my place, so I didn't do a thing.

Orleans Parish Medical Society.

Meeting held May 13, 1899.

ANTISTREPTOCOCCIC SERUM IN PULMONARY TUBERCULOSIS.

Dr. T. S. DABNEY called attention to a line of treatment recently pursued by him in cases of pulmonary tuberculosis. Bearing in mind the fact that other bacteria are frequently associated with the tubercle bacillus in the sputum of consumptives, and convinced of the possibility of these bacteria exerting an important influence on the disease, he had of late treated several cases with antistreptococcic serum.

In the first case, seen in consultation with Dr. L. G. LeBeuf, 30 c.c. of the serum had been given daily for five days, and again on the seventh day. In this man, whose sputum had been examined and found teeming with tubercle bacilli, there was rapid improvement. The temperature fell promptly from 102.6 to 99 degrees, then to normal, above which it has not since risen; he has gained flesh and is now able to work, though before this treatment was begun he had lain in bed five weeks.

In Case 2, seen with Dr. C. F. Sauter, the temperature, which had risen to 102.6, fell to 100 degrees after the first injection, to 98.5 after the second; while tubercle bacilli were originally present in his sputum, none are now to be found, and the patient is apparently well.

Case 3, occurring in his own practice, was one of laryngeal tuberculosis; no benefit was received from the three injections given, the patient dying promptly. In the last case subjected to this treatment, which was begun six days ago, two injections of 30 c.c. have been given, the first was followed by acceleration of the pulse from 110 to 140 per minute, with dyspnea, anorexia and dizziness. However, this injection had brought the temperature down from 103 to 100 degrees, and the second to 96.

Dr. F. W. PARHAM asked whether cultures had been made to determine the presence of streptococci in the sputum of the paients treated. He did not believe that an antistreptococcic serum would do good in a case of staphylococcic infection. As to the cases related, it could hardly be a coincidence that several of them improved promptly under the treatment described. Of the harmlessness of the serum used, when given with proper precautions, he was convinced from experience with it in a case in his own family. Of course, it must be plain that this treatment could be beneficial only by combating the secondary infection in tuberculous cases, destroying, not the tubercle bacilli, but material for their growth. The value of the culture method he had realized lately in a case of sequestrotomy of the femur. An agar tube had been planted by means of the platinum loop with material from caseous foci discovered in the course of the operation. A pure culture of tubercle bacilli had been obtained, showing the absence of pyogenic cocci from the depths of the bone, though they were no doubt present in the pus given off from the sinus.

Dr. L. G. LEBEUF said in the case under his care the physical signs had improved, and there was no longer any expectoration nor any febrile temperature; in spite of very unfavorable hygienic conditions, the patient, whom he considered improved but not cured, had kept quite well.

Dr. T. S. DABNEY, in answer to Dr. Parham's question, stated that the sputum report of one of the cases mentioned the presence of "numerous other bacteria" in addition to the tubercle bacilli. No specific mention of the presence of streptococci had been made in the sputum reports, though he had realized the importance of determining this point, and had asked that it be investigated.

Dr. W. M. PERKINS called attention to the fact that the antitoxins of individual germs are stated to possess a certain curative effect on diseases caused by other germs; similarly, the agglutination reaction may be obtained in a certain proportion of cases with other bacteria than the one with which it would naturally be expected.

OBSTETRIC CASES.

Dr. T. S. DABNEY reported an obstetric case that terminated in the expulsion of a large mass, weighing 1100 grams, and resembling placental tissue except in this detail, that it was covered with serous membrane over its entire circumference. On the following day a smaller mass, weighing 500 grams, was expelled. After this the uterus was found small and firmly contracted. The patient who presented this condition was a colored woman who had previously brought a number of children safely to term. He was at a loss to explain the expulsion of this mass unaccompanied by any trace of a fetus.

FRACTURE OF THIGH IN NEW-BORN.

Dr. R. J. MAINEGRA told of a case of fracture of the thigh in a new-born baby, in which considerable difficulty was experienced in reducing angular deformity on the fourteenth day, on account of the firmness of the callus already formed; ultimately good union was obtained, without perceptible shortening, an anterior splint being used in addition to the lateral splint. In two cases of fracture of the femur occurring in adults, he had observed shortening only after the patients had begun walking, careful measurements having been made during the course of treatment; the patients had been allowed up about the seventh or eighth week after the occurrence of the fracture.

Dr. H. B. GESSNER said that while he had never seen a case of fracture in a new-born infant, he had known union of a fractured clavicle to take place in fourteen days in a child of 3 years.

Dr. JOHN T. JONES knew a case of fracture of both bones of the forearm, occurring in a boy of 12 years, in which apparently good union had been obtained in ten days; in another case, a colored child of 4 or 5 years, good union took place in a week.

Topeka Academy of Medicine and Surgery.

Meeting held May 8, 1899.

RENAL INSUFFICIENCY: SOME OF ITS CAUSES, ANTECEDENTS AND CONSEQUENCES.

Dr. O. P. DAVIS read a paper on this subject, emphasizing that the exclusive function of the kidney is secretion and elimination. The insufficiency may be either functional or organic. It may be temporarily overworked, and yet not have any organic changes in its substance. Sometimes the kidney is not performing its proper function, yet no symptoms of renal disease are present. A healthy person should pass from 500 to 1100 grs. of solids every twenty-four hours, and when the amount is reduced to 200 or 300 grs., there is serious trouble and the kidney is not performing its duty properly. Infection is most frequently the cause of nephritis. Normally the kidney excretes toxins from the system, but when it is diseased the toxins accumulate and are not properly eliminated. Bacteria are not always indicative of renal disease; they may enter the urine from other sources, such as the bladder. He spoke of the frequency of nephritis after infectious diseases. Acute nephritis following scarlet fever is frequently followed by desquamative nephritis. Amyloid disease more obviously depends on some infection. The effect of alcohol on the kidney is overestimated, and cirrhotic kidney is not due to alcohol as frequently as many suppose.

The most important symptoms are: albuminuria, the quantity of which varies with the severity of the disease, and it is never present physiologically; dropsy and dyspnea. When a person over forty years of age complains of dyspnea, examine the urine at once. Dyspnea is due in part to uremia and in part to edema of the lungs.

Treatment: First find the cause, if possible, and eliminate all reflex disturbances. Combat the infection, lessen the strain on the kidney and relieve symptoms as they arise.

Dr. R. E. MCVEY spoke of unusual exercise frequently causing a temporary derangement of the kidney because it could not take care of the additional waste material. Increased frequency of urination may be due to disease of the prostate or bladder or to sexual excesses.

Dr. W. E. MCVEY pointed out that the intimate relation between the heart, kidney and liver should always be considered when either is affected.

Dr. S. G. STEWART said that the state of nutrition of the body had a great deal to do with the cause of the disease. The epithelium of the kidney suffers from overwork in eliminating extra waste, and from germs in infectious diseases. Sometimes there is degeneration without inflammation. Inflammation is not caused by increased metabolism, but by bacteria.

Dr. R. S. MAGEE spoke of the selective action of the tubular epithelium. Albumin is not present in normal urine because it is not a crystalline substance and can not pass through the epithelium unless diseased. Dyspnea is due to an increased amount of carbonic acid gas in the blood.

Fictitious Mineral Springs.—It is said that once during the progress of some extensive engineering and building works in the State of New York, a sulphur spring of great medical virtue was discovered, and was enclosed in a marble basin and exploited throughout the community. When the operations were complete and the army of workmen left, the spring lost its special qualities, and on investigation it was found that they were solely due to the sewage contaminations from the workers camp. A somewhat parallel case to this is reported from a city in Iowa, where the board of health ordered the filling up of a filthy well, the owner of which was bottling the water and selling it as mineral water. He had procured scores of testimonials as to the benefits received from those who have used it, and threatens to prosecute the board for damages. The guardianship of the public health is sometimes a thankless task.

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SATURDAY, JUNE 3, 1899.

THERE ARE twelve expresidents of the AMERICAN MEDICAL ASSOCIATION now living, and it was the intention to group all these on the title page of this souvenir edition; through a mistake, however, the photographs of two of these were omitted from the plate, and are therefore printed on page 1211.

OUR SOUVENIR NUMBER.

Commencing on Tuesday next, at Columbus, Ohio, the AMERICAN MEDICAL ASSOCIATION will hold its fiftieth annual meeting. Further, this will be the last meeting held in the nineteenth century, or, to avoid criticism we will say during the eighteen hundreds. For these reasons it has been thought an opportune time to commemorate the event by issuing a special number of the JOURNAL. It is a fitting opportunity to stop for a moment and look over, not only the fifty-two years since the ASSOCIATION was formed, but also over the century that will soon close. While American medicine has done much in the century that is nearly ended, the future will show more marked influence year by year. It is only during the last decade that the influence of American medical literature and work has been felt abroad. And even now these are not given the recognition deserved. One object of this souvenir number is to in a slight way show to the world something of what has been done by the medical profession of our country in the grand work of relieving suffering humanity from its various ills, and what has been its influence on the progress that has been made in the various branches of medicine. The determination to publish such a number was not made until it was almost too late to obtain suitable material, as it necessarily takes much time to look up the literature necessary in some of the departments, in order to present the subject satisfactorily in every way. At the last moment some of those on whom we had depended were compelled to disappoint us—for good and sufficient reasons in each case. Hence some branches are not touched upon at all. The JOURNAL extends its thanks to those who have so kindly written for this number.

THE AMERICAN MEDICAL ASSOCIATION.

The AMERICAN MEDICAL ASSOCIATION probably occupies at the present time a higher place in the estimation of the medical profession and the public than at any previous period in its history. There has been no time when its membership has been larger or has included a greater proportion of the leading lights in medical science than the present.

Its democratic organization, covering in its sections the whole field of medicine, and permitting membership to every reputable physician, through the local organizations, gives it an altogether special value as a professional bond of union throughout the whole extended territory of our country. There is or can be no other national body comparable to it in this respect; all other existing organizations, not strictly local in their character are essentially limited in their membership and functions, and can not represent the profession as a whole. The ASSOCIATION, therefore, occupies a unique position—it is the one organization that represents the whole regular medical profession and through which it can act. Its activity is not confined to its actual membership, for all the societies represented in it are co-operating factors and should be reckoned in estimating its influence.

What its influence has been in the past is best shown by a comparison of conditions that formerly existed, with those at the present. When the ASSOCIATION was first organized medical matters in the United States were in a chaotic state. What laws had existed regulating practice in the older States had been mostly repealed, and the process of elimination of all checks on quackery was being vigorously carried on to the finish. Medical schools had begun to multiply, but their standards were distressingly low, and there was no apparent tendency to elevate them. Even the authorities of Harvard entered a protest against the early attempts of the ASSOCIATION for the reform of the medical education of the day, and what better could be expected of the less favored institutions. This reform was from the beginning one of the fundamental objects of the ASSOCIATION; it was the first, and long the only, worker in the field, and must be largely credited with whatever good has been accomplished in this direction. This, however, is only one of its leading objects; its interest has been

active in behalf of the medical profession and its members, in whatever might, in the terms of the first resolutions, "be for the protection of their interests, for the maintenance of their honor and respectability, for the advancement of their knowledge and the extension of their usefulness."

It is needless here to review the details of the progress of the past fifty years, they are familiar to us all, and in all the AMERICAN MEDICAL ASSOCIATION has had its part. Whatever may have been the honorable record of its past, the present and the future of the ASSOCIATION will be not less rich in opportunity, and we trust also in accomplishment. There will always be work for it to do and its fields of usefulness will widen with the years. The medical millennium will not soon be reached; ignorance, prejudice, and superstition are always to be combatted, and it is only through such an organization as ours that physicians will be best able to meet many of the problems that arise from time to time in the social and political evolution of the age. More even than this are we to count in the functions of the ASSOCIATION its due share in the scientific advance of our profession, a field that, while not neglected in the past, should be yet more earnestly cultivated in the future. Our organization, while not less popular, should grow more and more scientific, keeping well in the advance line of progressive medicine. It is in this way that the future of the ASSOCIATION largely lies, and it will be the duty of its members to do all in their power to further it. All can not be investigators and discoverers, but study and observation are within the possibilities and opportunities of everyone. Our organization can, better than any other, set the tone and elevate the standing and consideration of American medicine, both at home and abroad.

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

It will not be out of place at this time to say a word in reference to the classes of membership in the ASSOCIATION. The Constitution speaks of four kinds of members: 1, delegates; 2, members by invitation; 3, permanent members; and 4, members by application. Delegates are those who are appointed by State societies, or by county or district societies, recognized by their respective State societies. The medical departments of the army and navy and the U.S. Marine-Hospital Service are also entitled to send delegates. The basis for delegates is one for each ten members or major fraction thereof. Delegate members have a right to vote, but none others have this privilege. Members by invitation are those who are from sections of the United States not otherwise represented. They must be endorsed by three members. They have the right to take part in the discussions, but can not vote. Permanent members are those who have served as delegates. These have the right to the floor, but can not vote. The fourth class, members by application, have the same rights. They are those who join the ASSOCIATION by application, and must be members of State, county or district medical societies which are entitled to representation. Hence it may be supposed that a large majority of those attending the annual meetings do not have the privilege of voting. The foundation principle is that while all are invited to attend and take part in Section and scientific work, the number who shall engage in the business part of the meeting should be limited.

FIN DE SIÈCLE.

We are all of us sadly tempted to believe that this year will end the nineteenth century, and some may have to be convinced before they will acknowledge that it does not do so. Even such a correct body as that of the General Assembly of the Presbyterian Church, which is supposed to be well up in such fine points, had to go through a discussion of the matter before it was willing to vote affirmatively on the resolution, which declared that the end of the century will occur on Dec. 31, 1900. Some who have written for this number of the JOURNAL have allowed the reader to assume that this year is to end the century, and while we are compelled to agree with the Presbyterians in the matter, we do so with the wish that it were otherwise. When we have to write "19" instead of "18," as we have been doing all our lives, we feel justified in unrighteously assuming, for the purposes of this souvenir number at least, that this is the end of the nineteenth century. P. S. Our "Correspondence" columns are *not* open to a discussion of this matter.

DURATION OF LIFE.

The *Bulletin* of the health department of Chicago, for April, gives some interesting statistics and diagrams showing the increased duration of life during the past quarter-century. According to it, the average age at death of 10,203 persons whose deaths are recorded for 1872, was fifteen years, two months and ten days. In 1882, the average age at death in 13,606 recorded was nineteen years, seven months and one day. In 1892 it was twenty-two years and eight months, and in 1898 the average age of 22,897 decedents was twenty-nine years, four months and sixteen days. These figures, remarkable as they are at first sight, are explainable by two facts: one, the increase of elderly and aged persons in the population, a factor to be considered in the statistics of every new and growing community, and the other, much more significant from a sanitary point of view, the reduction of infantile mortality. Thus we find that while the percentage of deaths of those over 50 has more than doubled since 1872, and that of those between 5 and 30 has been nearly stationary, the percentage of deaths under 1 year has been reduced from 33.8 to 23.7 per

cent. of the total, and that between 1 and 2 years cut down from 13.8 to 6.1, or less than half what it was in 1872. This decrease, especially in those under 1 year old, has been steadily progressive, a fact that indicates a regular advance in the sanitation of the city. Going back a little farther, it is stated that in 1869 the percentage on the total of deaths of children under 5 years of age was 62.8, while in 1898 it was hardly half that (35.2). Chicago certainly seems to be a much healthier city for children than it was formerly.

ORIGIN OF PERCUSSION.

DR. HENRY SMITH WILLIAMS, in a paper on "The Century in Scientific Medicine," in *Harper's Monthly* for June, gives CORVISART, physician to the first Napoleon, credit for introducing to the profession the method of examining the chest by percussion. While AVENBRUGGER, a German physician, was the first to call attention to the method, in a book published in 1761, yet, for some reason, no one until CORVISART made use of it paid any attention to the German discovery. It seems strange, as shown by Dr. WILLIAMS, that the still more important, yet simple idea of auscultation should not have been thought of for so many years after, and only an accident revealed to LÆNNEC the value of listening to the sounds of chest-auscultation. The magazine article referred to is a concisely stated account of the progress made in scientific medicine during the century, and the more such papers are placed before the general reader, showing what scientific medicine has done, is doing, and the progress it is making, the sooner will the reading public appreciate the difference between it and the quackery humbug and the various delusions which are so popular to-day.

A NEW METHOD OF TREATING TAPEWORM.

The editor of the *Iowa Medical Journal* announces a method of treating tapeworm that is certainly novel. It not infrequently happens, he says, that in removing these parasites several feet are passed, while the rest, with the head, remains in the intestine, and can not be readily detached. As the worm has a pair of longitudinal vessels extending throughout its length from the head, it occurred to him to utilize these, and he therefore in such a case cut off the lower projecting portion with the scissors and administered to the upper section of his wormship a hypodermic of one-half a grain of morphin, followed in a few minutes by a copious injection of water. The remainder of the worm promptly came away with the head, showing no signs of life whatever, while the previously severed section retained its vitality for an hour or more. The editor believes that in such a case as this, when there is danger of retention of the head in spite of efforts, the hypodermic syringe may be very useful. He certainly deserves credit for this novel therapeutic suggestion. We are strongly reminded, however, of the advice so freely given to younger members of humanity, to put a little salt on the tail of the bird they are anxious to catch.

CAUSE OF RHEUMATOID ARTHRITIS—ARTHRITIS DEFORMANS.

So far it can not be said that we have any exact knowledge of the real etiology of rheumatoid arthritis. It is therefore worth while to note the results obtained by v. DUNGERN and SCHNIDER[1] from the bacteriologic examination of the synovial fluid, and also the blood and internal organs, in a case of this disease. At first only the mucus of the gall-bladder was found to contain bacteria, in the form of small diplococci, but later, after the synovial fluid had been standing for a few days, similar diplococci appeared in it also. In both cases the organisms stained by Gram's method. The cultures, however, made under aërobic and anaërobic conditions, and from many joints, all showed the same diplococci, which do not correspond with any known organism. They were also isolated from the liver, and in large numbers from the bile. Without entering into any morphologic and cultural details concerning this microbe, which is quite like the micrococcus lanceolatus, it is of great interest to observe that when injected into the joints of rabbits it produces the same lesions as are found in arthritis deformans. Such changes were not obtained by injecting other micro-organisms, such as the common pus microbes. For these reasons the authors are inclined to emphasize the probable etiologic importance of this diplococcus. Satisfactory evidence that arthritis deformans is a chronic infection, a view which has gained some ground of late, has hitherto not been forthcoming, the facts at hand speaking just as much in favor of the older neurotic view. The above observations, coupled with the finding of the micro-organisms in the joints by other observers (SCHÜLLER, BALLANTNYE and BLAXALL), as well as the frequent association of arthritis deformans with previous acute infections, should stimulate investigators to continued bacteriologic examination of this intractable disease.

CURRENT MEDICAL LITERATURE.

As most of the contents of this number is retrospective, we may be pardoned for taking a little space to speak of the future. It has always been against the policy of the JOURNAL to make promises of what it would or would not do, but under the circumstances we desire to say a word as to the future in regard to one department—"Current Medical Literature." While the JOURNAL is the organ of the AMERICAN MEDICAL ASSOCIATION, it is also the organ of the American medical profession, and as such, attempts to reflect American medicine and its literature. To do this in part it gives each week a list of practically

[1] Munich Med. Woch., 1898, No. 43.

all the important original articles published in this country, whether these appear in the most popular metropolitan weekly or in the most obscure provincial monthly, recognizing the fact that some of the best work may originate in the most obscure places. It also gives an epitome of salient points of the most worthy of these articles, although it does not claim to abstract all. Hereafter the plan will be to give as nearly as possible digests of the more important papers, especially if they contain anything new or of value. When the title of the paper does not indicate the character of its contents and no abstract appears, sufficient mention will be made to indicate its tenor. Thus each week the reader will be informed of all noteworthy papers published in this country on any subject in which he may be interested. Further, to make this department still more valuable, and that of a permanent nature, at the end of each volume there will be given an alphabetic list of authors, with page references, to which the reader may refer for the title. In this way it will be shown what each man has published during the six months preceding. This "authors' list" will, it is believed, prove of great value, especially to those who desire to look up particular subjects in the literature of the day. In the ensuing volumes, it is our purpose to give also a list of papers published, arranged alphabetically according to subjects. It is not necessary to call attention to the value of such a list of authors and subjects published every six months. In other words, the JOURNAL will be an *index medicus* of American medical literature, making it of value, not for the present only, but also for the future. One difficulty which has been encountered thus far in making up these lists is the lack of a ready means of discovering whether a paper published as original is really such. Frequently it is found that what was at first supposed to be an original paper proves to be one that has been published elsewhere and copied without giving credit. In the future it is hoped that by a system now adopted it will be possible to avoid repetition of titles, so that when an article has been indexed once under one journal, it will not be indexed again, though published by others.

REPORTS OF ANALYSIS OF CITY WATER BY CHICAGO HEALTH DEPARTMENT.

The health department of Chicago has made an enviable record for itself during the last few years, and is now doing decidedly effective work along the usual lines followed by municipal health departments, including the daily analysis of the city water-supply. The department is pursuing a rather peculiar policy, however, in the manner of publication in the daily press of the results of the chemic and other analyses of the Chicago water. As is well known, the water-supply of Chicago comes from Lake Michigan, and from the same part of Lake Michigan into which the sewerage of the city is at times discharged in larger or smaller quantities. Depending on the character of the prevailing winds and other rapidly changeable conditions, the sewerage is liable to find its way into the water-mains through the intakes in the lake, and thus it is brought about that there is established a circle of the most vicious nature. Now, the reports in the public press of the analyses of this water by the Chicago Health Department are liable to be misleading for the general public because the reports are accompanied with, it seems to us, an unnecessary word or two of general advice as to the nature of the water in this or that district, for such and such a day or period. Thus to-day we will read that the water from the Lake View intake is bad and *should be boiled!* Day after to-morrow the same water will have changed its quality and be "usable," which in the lay mind would most likely be interpreted as meaning that it can be consumed with impunity without being boiled. Manifestly this way of doing things is misleading. A water which is bad a day or two every week or so, is bad all the time, from the standpoint of public hygiene, and should be boiled every day when used for drinking purposes. How is the public to know at what hour the water to-day reported as "usable" becomes so bad again that it ought to be boiled? The changes in the water occur quite rapidly, it is true, but yet so gradually that a family relying on this sort of advice from the municipal laboratory would be continually misled. It, seems, indeed, that the custom here outlined, the exact reason for which it is difficult to understand, would tend directly to defeat the very purpose for which the analysis is made, namely the prevention of water-borne diseases. The health department of Chicago should have the courage of its convictions and every single statement concerning the city water emanating from its laboratories should be coupled with the warning, "boil the water"! This is the only consistent policy to pursue —no matter what effect this may have upon the reputation of the city and its goverment—until such a time as the completion of the great drainage canal permanently changes the existing unsanitary conditions.

TUBERCULOSIS CONGRESS.

The tuberculosis congress just held in Berlin must be recognized as of greater importance as regards its subject and its possible consequences than the peace congress now being held at The Hague. War is only an unfortunate incident in modern civilization, but tuberculosis is an ever-present and active enemy to mankind the world over. The present meeting is not the first general movement against the foe, but it is the first with general international sanction and as such deserves all the attention and interest it receives. That the Governments should take up the matter is in its way a triumph for medicine, which has long

urged the necessity of more than mere local or individual action against the pest. The public is beginning to recognize its danger and, as is usually the case, it is liable to exaggerate it and to go to extremes, causing needless hardships to the unfortunate, and useless and extravagant measures for imagined protection. As physicians we know that tuberculosis is a contagious disorder, but we also know that it is preventable to a very large extent by altogether rational measures, and that its fatality is not so great as has been estimated by some pessimistic writers. On the other hand, we know that it is a far more disseminated cause of evil than is appreciated by the public, and that while consumption produces perhaps 11 per cent. of deaths, tuberculosis in other forms, if properly estimated, would show a very appreciable percentage of mortality and a vastly increased sum of human misery. The congress will have done an immense service if it be only by authoritatively stating facts, which statements coming from it will have far greater weight with the public than those of individuals, however eminent, or even those of lesser sanitary bodies. This implies what we believe is a justifiable inference, that its dicta will be governed by an enlightened and liberal spirit, avoiding any extreme as well as any ultra-conservative views or theories. The need of such an educational influence on the public is too manifest to require argument; at present there is far too much general indifference based on ignorance and varied only by occasional panicky and futile propositions. A community that endures the spitting nuisance without remonstrance may agitate and even attempt to legislate for the absolute exclusion of consumptive immigration or the rigid isolation of all victims of the disease. It is to be hoped that when the conclusions and recommendations of the congress are published they will be such that no government or community can reasonably decline to endorse and adopt them. Consumption is already on the decrease, among men, and there is every reason to hope that it will before long lose its bad eminence as a destroyer of our species.

Medical News.

THE DEATH of Dr. Norman Kerr, is cabled from London, England, May 31.

THE FIRST death from yellow fever, in New Orleans, La., this summer, occured May 30.

DR. BAYARD HOLMES, Chicago, leaves this week for Europe, expecting to return about October 1.

ON JUNE 13, the Johns Hopkins University will graduate 120, including 43 A. B's, 39 Ph. D's and 33 M. D's.

DR. G. C. SAVAGE, Nashville, Tenn., has been elected secretary of the medical department of Vanderbilt University.

DR. WM. L. BALLENGER, Chicago, has resigned the chair of otology in the Chicago Eye, Ear, Nose and Throat College.

DR. ARTHUR DEAN BEVAN, professor of anatomy in Rush Medical College, Chicago, has been made associate professor in surgery.

A CASE of smallpox was recently discovered in the public almshouse on Blackwell's Island, N. Y., and the institution was at once placed under strict quarantine.

THE ANNUAL commencement of the Woman's Medical College of the New York Infirmary for Women and Children, was held May 25, with a class of eighteen.

CHIEF GOOD, of the bureau of health, Philadelphia, has supplied the police stations with antitoxin to be given to the needy poor on the physician's personal application.

DR. J. G. CARPENTER of Stanford, Ky., recently delivered a course of lectures on gynecology in Barnes Medical College, St. Louis, in the absence of Prof. James T. Jelks.

METHODISTS of Chicago and vicinity have raised $150,000 for the erection of the new Wesley Hospital, to cost $200,000. Ground for the new building will be broken next month.

THE military bands in France visit the military hospitals once or twice a week to play to the inmates, and it is now proposed to extend this practice to include the general hospitals in garrison towns.

THE STATE medical council, at a meeting held in Harrisburg, Pa., May 24, adopted a resolution that it is the sense of the council that the practice of osteopathy is illegal, and amenable to the laws of the State.

THE FOURTH annual course of the Levi C. Lane lectures, beginning June 28, will be delivered at the Cooper Medical College, San Francisco, Cal., by Prof. N. Senn. This course will consist of ten lectures on "Emergency and Military Surgery."

DR. WM. F. LOCKWOOD has been elected professor of therapeutics, materia medica and clinical medicine, and Dr. Samuel J. Fort, associate professor of materia medica and pharmacy, in the College of Physicians and Surgeons, Baltimore.

SIXTEEN cases of smallpox were found in Philadelphia, May 21, affecting colored inhabitants of Nicetown. On the 26th five more cases were discovered, and later several more. In all there were twenty-nine being cared for at the municipal hospital.

DR. LOUIS BAZET, San Francisco, has been made, by the king of Portugal, a Knight of the Ancient Military Order of Jesus Christ, a rare honor to be conferred on a foreigner, and made in acknowledgment of Dr. Bazet's kindness to the Portuguese residents of San Francisco.

DR. JOHN C. HEMMETER, University of Maryland, who, before the AMERICAN MEDICAL ASSOCIATION at Baltimore, a few years ago, performed his "Cantata of Hygiea," has now written the music to the twenty-third Psalm. It is of the Hayden style, for full male chorus, solo, quartette and orchestra.

NEW ENGLAND alumni of the Albany Medical College organized an association at the Hunt Memorial Hall, Hartford, Conn., May 25. The following officers

were elected: president, T. D. Crothers, Hartford; secretary, W. G. Murphy, East Hartford; treasurer, John O'Flaherty, Hartford.

THE NEW Michigan State medical bill has passed both houses of the legislature, and awaits the governor's signature. "Christian Scientists" are excluded from the provisions of the measure and will be at liberty to continue their so-called "healing," so far as the bill is concerned, should it become a law.

PROF. WM. K. BROOKS, Baltimore, the author of "The Foundations of Zoology," with Messrs. G. A. Drew, E. W. Berger and Caswell Graves, all of the biologic department of Johns Hopkins, will spend the summer at the laboratory of the U. S. Fish Commission, Beaufort, S. C., working especially in marine biology.

A PHYSICIAN of Pennsylvania has asked for a mandamus against the State medical council to show cause why he should not be permitted to practice, since he had complied with the law in another State, regarding this question. The deputy attorney reserved his opinion as to whether the mandamus would be granted.

GOVERNOR ROOSEVELT of New York has signed the bill recently passed by the legislature allowing cities of the first class to establish and maintain, subject to the approval of the State board of health, hospitals for the systematic treatment of pulmonary tuberculosis; also the bill providing for compensation to owners of cattle destroyed by order of the department of health of New York City.

IN EXAMINING the throat of a woman who had applied for laryngologic treatment, according to *Archiv. f. Laryng.*, E. Berthold noticed that the vocal chords had the appearance found only in the male adult. Further investigations disclosed that the individual was a hermaphrodite, who eight years later returned for a certificate to allow the change of sex, having fallen in love with a woman.

IT IS stated that four persons living at Buffalo, N. Y., have been indicted under the United States law for not permitting medical attendance on a child of one of the defendants who had been treated by "Christian Scientists," and who subsequently died of pneumonia. Under the indictment the father of the child becomes one of the defendants. The parties were released under bail of $2500.

THE STATE Agricultural department of New York has commenced an active crusade against dealers found with "bob" veal in their possession, and a large number of carcasses have been seized and destroyed along the line of the railways between Utica and New York city. Under the recently amended law the penalties (which are fixed at from $25 to $100 for each offense) can be sued for, and almost fifty cases have been sent to the attorney-general for prosecution.

THE STATE board of charities has refused the application of Mrs. Rose Hawthorne Lathrop for articles of incorporation for the Free Home for Incurable Cancer, which she has been conducting for some time in the lower part of the borough of Manhattan, N. Y. The reasons are that the institution is not needed in the locality where it is situated, and that the patients for whom it is designed can be accommodated and cared for better in the department of charities' hospitals.

DR. FLOYD W. MCRAE has sufficiently recovered from the operation for appendicitis, referred to last week, to be able to give the oration in Surgery next Wednesday. He is still in New York City.

DELEGATES to the International Conference for the Prevention of Syphilis and Venereal Diseases, to be held at Brussels Sept. 4, 1899, have been named as follows: Prof. I. N. Bloom of Kentucky, chairman; Profs. Jas. C. White of Massachusetts, J. Wm. White of Pennsylvania, Geo. Chismore of California, John P. Bryson and W. A. Hardeway of Missouri, J. Frank Lydston and James Nevins Hyde of Chicago, L. Duncan Bulkley, Sigmond Lustgarten and R. W. Taylor of New York.

THE FOLLOWING promotions have been made in the teaching faculty of the medical department of the University of Pennsylvania; Dr. James Tyson has been elected professor of practice of medicine, and will give both the didactic lectures and clinic instruction; the chair of clinic professor of medicine has been bestowed on Drs. J. H. Musser and Alfred Stengel. There will be four assistant professors of medicine, as follows: Drs. Judson Daland, M. Howard Fussell, John K. Mitchell and Frederick A. Packard.

THE Paris daily press has been commenting with much glee on the discovery that a person who had been attending the courses at the Lariboisière Hospital, following the visits of the prominent medical attendants, even assisting occasionally at operations, is not a diplomate physician at all, but an oil merchant. Owing to his connection with the Lariboisière he had acquired quite a little practice outside, in eye and ear troubles and obstetrics, his "specialties."

THE annual session of the American Surgical Association opened in Chicago May 31. Dr. De Laskie Miller of Chicago delivered the address of welcome, and Dr. W. W. Keen of Philadelphia, the address on "The Technic of Laryngotomy." The discussion of the "Surgery of the Spanish War," was by Drs. Senn of Chicago, N. M. Ferebee, U. S. N., G. R. Fowler of Brooklyn, and C. B. Nancrede of Ann Arbor. The afternoon of June 1 was devoted to a clinic held in the amphitheater of Rush Medical College, with a banquet in the evening at the Chicago Athletic Club. A fuller report will be given next week.

Correspondence.

Army Medical Service.

WAR DEPARTMENT: SURGEON-GENERAL'S OFFICE,
WASHINGTON, D. C., May 22, 1899.

To the Editor:—Your editorial note relating to "The Army Medical Service" (See JOURNAL, May 20, p 1123) indicates that a misapprehension exists with reference to the appointment of medical officers in the army, and I consider it my duty to correct this at the earliest possible moment.

Appointments in the regular army are made entirely on the recommendation of army medical boards convened for the purpose of examining the candidates who present themselves, and neither political nor personal influence has any weight in these appointments.

Regimental surgeons of volunteer regiments under existing laws are appointed by governors of States, and neither the secretary of war nor the surgeon-general of the army has anything to do with these appointments.

Division and brigade surgeons of volunteers, and the medical officers of the so-called immune regiments, have been appointed by the President upon the recommendation of the surgeon-general of the army.

Acting assistant-surgeons have been appointed and discharged by the surgeon-general of the army or by the chief surgeons of military departments and armies in the field. These appointments are of a temporary nature, and during the first months of the war the urgency for medical assistance was so great that it was not practicable to convene medical examining boards for the selection of "contract surgeons."

It is a mistake to suppose that the secretary of war has attempted to control the appointment of commissioned medical officers or of acting assistant-surgeons. In a few instances he has suggested the appointment of physicians personally known to him, and naturally his wishes have had due consideration. In making recommendations for presidential appointments or in appointing acting assisting-surgeons, I have not been influenced by political reasons, but a large number of those seeking appointment filed with their applications letters from members of Congress and other influential persons. These letters have been considered simply as testimonials as to character and professional standing, and it has been my aim in all cases to obtain satisfactory professional endorsement for candidates not personally known to me. No doubt mistakes have been made, but I believe that a large majority of those appointed have proved themselves to be competent physicians and many have shown a special aptitude for the military service.

Very respectfully, GEO. M. STERNBERG,
Surgeon-General, U. S. A.

Upper Panes Replaced With Double Panes.

ELLICOTT CITY, MD., May 18, 1899.

To the Editor:—I note in the JOURNAL of April 29, under "Public Health," that a prize has been awarded Dr. Caslaing "by the French Academy of Science, for his suggestion that two upper panes in each window be replaced with double panes a short distance apart, the outer pane leaving a narrow opening at the bottom, as it does not reach quite to the sash below, and the inner pane leaving a similar opening at the top, as it does not reach quite up to the top of the sash."

This seems a curious thing, when we read in Parkes' "Hygiene" (Edition 1883, Wood's Library, p. 174, Vol. i), in speaking of natural ventilation and its practical application: "Various plans have been proposed by different persons. The panes of glass may be made double, spaces being left at the *bottom* of the outside pane and the *top* of the inner one, so that the wind is obliged to pass up between the two panes before it enters the room."

Is there nothing new under the sun? And under the circumstances does not this prize belong to the original suggestor? Our French colleague must have thought of this independently, for no one would accuse him of plagiarism, but where, oh where, was the board of censors of the Academy that they did not know something taught in our medical schools for the past sixteen years? Very truly yours,

S. J. FORT, M.D.

Clinic Gynecology in Paris and America.

CINCINNATI, OHIO, May 16, 1899.

To the Editor:—It seems strange that in this day when the efficiency of medical study and medical practice is accomplished chiefly by specialization, the University of Paris should not long since have established a chair of clinic gynecology. It would seem, however, from recent proceedings of the municipal council of Paris (*Le Progrès Médicale*) that this long delayed step is at last an accomplished fact. An address to that august and conservative body by M. André Lèfevre, recounted the fact that such a chair exists in the faculties at Besançon, Bordeaux, Dijon, Grenoble, Montpelier, Nancy, Nantes, Poitiers, Rennes, Limoges and Rouen; yet at the great metropolis this department is not organized. M. Lèfevre reviewed at length the development and present status of the chair in Germany and wound up by saying that they teach clinic gynecology, "not only in all the universities of Europe and the United States but also at Melbourne Tomsk, Bombay, Madras, Cordova (Argentine Republic), Bahia, Lima and Tokio." After slight opposition the municipal council voted a "subvention" for a chair of clinic gynecology to be opened November 1, consisting of 12,000 francs for the professor, 1200 for the chief of clinic, 2200 for the chief of the laboratory.

It is highly gratifying to feel that Paris by this step has increased the efficiency and the attractiveness of medical teaching in that great capital. It is gratifying also to observe that in taking this step, the principle of substantial reward for labor in a clinic department is recognized. While the United States anticipated Paris by many years in the establishment of this chair in the various universities and medical schools of the country, yet, almost without exception, the professors receive no direct compensation for their services. It is assumed that their reward will come in the nature of increased private patronage. The natural tendency of such a policy must be to minimize interest in and devotion to the strictly professional work and to stimulate attention to that labor which will yield the bread of life. The sooner America ceases to offer these professorships as gratuitous advertising media, and adopts the tardy example of Paris, the better for America.

CHARLES A. L. REED, M.D.

Hydrophobia in California.

PASADENA, CAL., May 22, 1899.

To the Editor:—I wish to report the occurrence of the first truly authenticated case of hydrophobia in Southern California. The onset, course of the disease, and death were typic, and subdural injections of cerebrospinal fluid of the patient into rabbits were followed by death of one of the three animals experimented on (after a period of twelve days) in convulsions followed by paralysis. As the whole case was a characteristic one (and it was my privilege to see a great many cases with Pasteur, in Paris, in the spring of 1893), the details are hardly worth publishing; but as Southern California has so far been considered exempt from this disease, the occurrence of this first authenticated case, I believe, merits chronicling in the interest of medical statistics and of public sanitation. Any details of the case, of postmortem finding, etc., will be gladly forthcoming, should you desire them.

Respectfully yours,
ALFRED C. CROFTAN, M.D.

Fluid Vaccin Virus.

MCCOOK, NEB., May 17, 1899.

To the Editor:—At a meeting of the Nebraska State Medical Society, held May 9, I called attention to a new method of handling fluid vaccin virus. The method is simple, quick and efficacious, and will at once appeal to readers of the JOURNAL: Break off both ends of the capillary tube of virus and blow the contents into a sterilized spoon or other small receptacle. The one or two drops which go to make up the contents of the tube are then drawn into a sterile hypodermic needle, and the needle pushed just under the outer skin, where pressure on the piston of the hypodermic deposits the drop of serum.

No dressing is necessary, for the skin furnishes a protection for the virus, and you will find that nearly all, if not all, of your cases thus inoculated will "take." The method takes less time and is more cleanly, sure and scientific than any of which I have knowledge. Sincerely yours,

W. V. GAGE, M.D.

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BOARD OF TRUSTEES—E. E. Montgomery, Philadelphia, Pa., 1899; H. L. E. Johnson, Washington D. C. (unexpired term), 1899; C. A. L. Reed, Cincinnati, Ohio, 1899; Joseph Eastman, Indianapolis, Ind., 1900; J. T. Priestley, Des Moines, Iowa, 1900; Truman W. Miller, Chicago, Ill., 1900; Alonzo Garcelon, Lewiston, Me. (Pres.), 1901; T. J. Happel, Trenton, Tenn., 1901; I. N. Love, St. Louis, Mo., 1901.

JUDICIAL COUNCIL—Term Expires 1901: S. Bailey, Iowa; D. R. Brower, Illinois; N. S. Davis, Illinois; H. D. Didama, New York; D. Mason, Washington; F. T. Rogers, Rhode Island; Milo B. Ward, Missouri. Term Expires 1900: D. W. Crouse, Iowa; R. C. Moore, Nebraska; T. D. Crothers, Connecticut; G. B. Gillespie, Tennessee; W. T. Bishop, Pennsylvania; C. H. Hughes, Missouri; Ida J. Heiberger, District of Columbia. Term Expires 1899: G. W. Stoner, U.S. M.-H. Service; C. W. Foster, Maine; J. McFadden Gaston, Georgia; W. S. Jones, New Jersey (unexpired term); H. Brown, Kentucky; X. C. Scott, Ohio.

ORATION ON MEDICINE—J. C. Wilson, Philadelphia, Pa.

ORATION ON SURGERY—Floyd W. McRae, Atlanta, Ga.

ORATION ON STATE MEDICINE—Daniel R. Brower, Chicago, Ill.

Officers of Sections, 1898-99.

Practice of Medicine—Frank Billings, Chicago, Chairman; Carroll E. Edson, Denver, Secretary.

Surgery and Anatomy—W. J. Mayo, Rochester, Minn., Chairman; M. L. Harris, Chicago, Secretary.

Obstetrics and Diseases of Women—A. H. Cordier, Kansas City, Mo., Chairman; W. D. Haggard, Jr., Nashville, Tenn., Secretary.

Materia Medica, Pharmacy and Therapeutics—Thomas H. Stucky, Louisville, Ky., Chairman; Leon L. Solomon, Louisville, Ky., Secretary.

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State Medicine—Arthur R. Reynolds, Chicago, Chairman; W. P. Munn, Denver, Secretary.

Stomatology—George V. I. Brown, Milwaukee, Chairman: Eugene S. Talbot, Chicago, Secretary.

General Business Committee, 1898-99.

Practice of Medicine—Wm. E. Quine, Chicago; J. H. Musser, Philadelphia; S. A. Fisk, Denver.

Surgery and Anatomy—C. A. Wheaton, St. Paul; Reginald Sayre, New York City; W. L. Rodman, Louisville, Ky.

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Laryngology and Otology—G. V. Woolen, Indianapolis; Wm. E. Casselberry, Chicago; B. Alex. Randall, Philadelphia.

Diseases of Children—A. C. Cotton, Chicago; (Vacancy); J. P. Crozer Griffith, Philadelphia.

Physiology and Dietetics—H. Bert Ellis, Los Angeles; A. P. Clarke, Cambridge, Mass.; Randell Hunt, Shreveport, La.

Neurology and Medical Jurisprudence—T. D. Crothers, Hartford, Conn.; W. J. Herdman, Ann Arbor, Mich.; Chas. H. Hughes, St. Louis.

Cutaneous Medicine and Surgery—L. Duncan Bulkley, New York City; A. Ravogli, Cincinnati; A. W. Brayton, Indianapolis.

State Medicine—Chas. H. Shepard, Brooklyn; Elmer Lee, New York City; (Vacancy).

Stomatology—A. E. Baldwin, Chicago; M. H. Fletcher, Cincinnati; R. R. Andrews, Cambridge, Mass.

Executive Council—W. J. Herdman, Ann Arbor, Mich., Chairman; Warren B. Hill, Milwaukee, Vice-Chairman; C. A. Wheaton, St. Paul; J. H. Musser, Philadelphia; L. Duncan Bulkley, New York, Secretary.

Public Health.

Typhoid Fever and Drinking Water.—It is seldom that a disease in man fulfils the conditions of an experimental test on animals, and some recent cases of typhus in France are interesting on this account. The town of Falaise has excellent water, and typhoid fever is almost unknown at the barracks. But the water was shut off for some repairs and the men were ordered to obtain their supply from certain wells. A few insisted on using water from some contaminated wells near by, and four of them promptly succumbed to typhoid.—*Rev. Gen. de Path. Int.*, May 5.

Maternal Assistance.—The little town of Maule, France, with 1400 inhabitants, has a "maternal assistance society" which is a model worthy of imitation. For at least a month before the birth of the child lay members of the society visit the mother at her home, assist her financially if necessary, and instruct her in the principles of the hygiene of pregnancy and infant-raising. These members are the wives of physicians, lawyers, merchants, farmers, etc., who are trained by a special course of lectures and object-lessons. By their devotion and tact they win the respect and affection of their charges and lay the foundations for hygienic households. At the first indications of labor a paid nurse is sent with sublimate, solution of phenic acid, alcohol and cotton, with a basin, syringe, etc., supplied by the society, with also a bag containing six sheets, four night-gowns, six napkins, one pillow-case and three handkerchiefs. These articles, washed and disinfected, are later returned to the society headquarters, which consists of a wardrobe in the town hall, and are ready for the next case. The infant trousseau is presented complete with fourteen articles. The nurse remains until the mother is fully restored. The funds are supplied by dues, donations and a small subsidy from the town and charity organizations. The society also owns an incubator.—*Bul. de l'Acad. de Méd.*, May 2.

Health Reports.—The following cases of smallpox, yellow fever, cholera and plague have been reported to the surgeon-general of the United States Marine-Hospital Service for the week ended May 27, 1899:

SMALLPOX—UNITED STATES.

California: Los Angeles, May 6 to 20, 4 cases.

District of Columbia: Washington, May 6 to 20, 2 cases, 1 death.

Florida: West Tampa, May 13 to 20, 3 cases.

Georgia: Savannah, May 9 to 24, 10 cases.

Indiana: Evansville, May 13 to 20, 7 cases.

Kentucky: Louisville, May 11 to 23, 18 cases.

Louisiana: New Orleans, May 12 to 20, 5 cases; Shreveport May 13 to 20, 1 death.

Massachusetts: Swampscott, May 19, 1 case.

Minnesota: St. Paul, May 6 to 13, 1 case.

Missouri: St. Louis, May 2 to 22, 12 cases.

Ohio: Cleveland, May 13 to 20, 13 cases.

Pennsylvania: Johnstown, May 13 to 20, 1 case; Nicetown, May 25, 25 cases; Philadelphia, May 13 to 20, 6 cases.

Porto Rico: Ponce, April 29 to May 6, 4 cases.

Virginia: Newport News, May 24, 4 cases; Norfolk, May 19 to 25, 9 cases; Portsmouth, May 19 to 25, 14 cases.

Washington: Spokane, May 13 to 20, 4 cases.

Wisconsin: Milwaukee, May 13 to 20, 2 cases.

SMALLPOX—FOREIGN.

Belgium: Antwerp, April 22 to May 6, 18 cases, 5 deaths.

Bohemia: Prague, April 29 to May 6, 6 cases.

China: Hongkong, April 2 to 22, 28 cases, 16 deaths.

England: London, April 22 to 29, 3 cases.

Germany: Hamburg, April 29 to May 6, 3 cases.

Greece: Athens, April 29 to May 6, 21 cases, 8 deaths.

India: Bombay, April 18 to 25, 9 deaths; Calcutta, April 1 to 15, 3 deaths; Madras, April 15 to 21, 1 death.

Japan: Nagasaki, April 1 to 20, 4 cases, 1 death; Osaka and Hiogo, April 15 to 22, 1 case.

Mexico: Chihuahua, May 6 to 13, 3 deaths; Mexico, May 1 to 14, 35 cases, 10 deaths; Nuevo Laredo, April 29 to May 13, 2 deaths.

Russia: Moscow, April 15 to 29, 14 cases, 9 deaths; Odessa, April 29 to May 6, 1 case, 2 deaths.

Nicaragua: Bluefields, April 29 to May 13, 2 cases.

Straits Settlements: Singapore, February 1 to March 31, 34 deaths.

YELLOW FEVER.

Mexico: Vera Cruz, May 4-18, 45 cases.

CHOLERA.

India: Bombay, April 18 to 25, 6 deaths; Calcutta, April 8 to 15, 9 deaths.

PLAGUE.

China: Hongkong, April 1 to 22, 60 cases, 57 deaths.

India: Bombay, April 18 to 25, 442 deaths; Calcutta, April 8 to 15, 135 deaths; Madras, April 15 to 22, 1 death.

Necrology.

ROBERT S. TRACY, M.D., College Physicians and Surgeons, New York City, 1896, whose funeral took place from his father's residence in Plainfield, N. J., May 14, was drowned in the Saranac River, April 13. He was an inmate of the sanatorium at Saranac Lake, where he had gone for the recovery of his health. A recent break in the ice and a lonely midnight walk toward the hospital after a social gathering, were the only clues of the accidental disappearance. His body was found about May 10, in a net stretched across the river to intercept it in case it floated down when the ice broke up. Dr. Tracy was 27 years old and had served as interne at the New York Hospital and afterward at the Sloane Maternity Hospital.

HENRY BAIRD LAZEAR, M.D., Monongalia, W. Va., died May 11, aged 69 years. He was graduated from Jefferson Medical College, Philadelphia, in 1858, served two years in the Civil War as captain of Company E, Seventh West Virginia Infantry, and was badly wounded at the battle of Antietam, and resigned his captaincy in 1863, soon afterward being commissioned surgeon, and serving in that capacity until the close of the war.

ENOCH W. MOORE, M.D., a physician at Decatur, Ill., since 1856, former surgeon of the 115th Illinois, died at Cleburne, Texas, aged 78, May 19.

SAMUEL W. BUDD, M.D., Bellevue, N. Y. 1875, of Petersburg, Va., died May 13 at the Johns Hopkins Hospital, Baltimore, aged 47 years. After a house service in the Roosevelt Hospital, New York City, in 1875 and 1876, he settled in Petersburg, in which vicinity he was born.

JOSEPH WILLIAM STICKLER, M.D., College of Physicians and Surgeons, New York City, 1879, of Orange, N. J., died May 17 from apoplexy, at a hotel in New York, while on a visit to that city. He was born in Hoboken, N. J., in 1854, but went to Orange in 1858, and there became prominent as a sanitarian, climatologist and bacteriologist.

E. B. WARD, M.D., died in Laingsburg, Mich., May 12, aged 64 years. In 1858 he was graduated from the medical department of the University of Michigan, and in 1869 went to the Legislature for a term.

GEORGE M. WALLHAUSER, M.D., Newark, N. J., died May 19, aged 28 years, leaving a widow. He was a younger brother of Dr. H. J. F. Wallhauser, also of Newark.

COLBY D. BUFFINGTON, M.D., Atwater, Ill., died May 11 aged 52 years. . . James A. Clarke, M.D., Erie, Pa., May 16, aged 36 years. . . John Bordon Fulton, M.D., Harvard, 1869, of Irvington-on-the Hudson, N. Y., died there May 20. . . D. Harris, M.D., Whitney, Texas, May 15. . . A. J. Hart, M.D., Pacific Grove, Cal., May 7., aged 67 years. . . Dennis Kearnes, M.D., Alpena, Mich., May 13, aged 42 years. . . A. J. Longfellow, M.D., Fostoria, Ohio, May 15, aged 68 years. . . O. A. Moreland, M.D., Jamestown, Pa., May 18, aged 42 years. . . A. B. Younkman, M.D., Bremen, Ind., May 16.

DEATHS ABROAD.

DR. NORMAN KERR, according to the associated press dispatches, died in London, England, May 31. Dr. Kerr received his degree of M.D. and C.M. in Glasgow, 1861, and was widely known as a specialist in inebriety. Among other honors he was a Fellow of the Linnean Society, president of the Society for Study of Inebriety, Fellow of medical and obstetric societies, vice president International Congress of Medical Jurisprudence, corresponding member of American Society for Study and Cure of Inebriety, etc. Among his prominent works may be mentioned: "Inebriety, its Etiology, Pathology, Treatment and Jurisprudence;" "Truth About Alcohol;" "Inebriate Criminal Responsibility;" "Stimulants in Work-houses;" "Does Inebriety Conduce to Longevity?" "Inebriety" (*Ann. Univ. Med. Sci.*); "Alcoholism and Drug Habits" (Twentieth Century Practice of Medicine).

Miscellany.

Erratum.—In the advertisement of Howard University (see this issue, adv. page lxix), tuition fee should read $80 in the medical and dental colleges and $70 in the pharmaceutic college.

Philadelphia Mortality Statistics.—The deaths for the week just ended numbered 384, a decrease of 6 over last week, and of 25 over the corresponding period of last year. Of the total number, 102 occurred in children under the age of 5 years. The principal causes of death were: apoplexy, 14; nephritis, 34; cancer, 17; tuberculosis, 55; diabetes, 3; heart disease, 30; influenza, 1.

Pathogenic Microbes in Flowers.—D. Freire has found the streptococcus pyogenes and the pyocyaneus in a rose and a peach blossom. He suggests that there may be some connection between the colors of the flowers and the pigment of the microbes that are found in them, and calls attention to the fact that certain microbes emit odors similar to the perfume of the flowers which they inhabit.—*Presse Médicale*, May 10.

Hemorrhoidal Diathesis.—Federn believes that hemorrhoids proceed from a general disturbance of the organism, manifested by increased resistance in the arteries and capillaries, exaggerating the cardiac contractions. When the heart can no longer overcome the resistance in the abdominal vessels, stasis results, particularly in the hemorrhodial veins. Extirpation of the hemorrhoids does not remove the cause. The aim should be to reduce the blood-pressure, which can be accomplished by purgatives in fresh cases.—*Semaine Méd.*, May 10.

Appendicitis Larvata.—By this term Ewald describes a rare syndrome which is caused by a diseased appendix, but develops without any symptoms pointing to it, assuming the form of digestive disturbances, kidney or liver troubles. After years of ineffectual medical treatment, the subjects are declared neurasthenics, hysterics or incurable. He has observed eight cases since 1894. As soon as the appendicular trouble is diagnosed and the appendix removed, a permanent cure is effected. Practitioners should pay especial attention to this "borderland" affection, as the subjects never think of applying to a surgeon for relief.

Operative Difficulties of Symphysiotomy.—A recent Paris thesis (M. Rubinrot) observes that the worst enemies of symphysiotomy are those who preach its simplicity without mentioning the accidents that may occur. Among the difficulties that may be encountered in incising the soft parts are dilated, possibly inflamed, paravulvar veins, nodules of fat, and cicatricial tissue from previous operations. It is also sometimes difficult to locate the articulation, owing to ossification, obliquity or deformity of the interline. The sacroiliac articulations may prevent the separation of the divided bones, by commencing ossification or atrophy. Then there is the possibility of hemorrhage, generally from the plexus of Santorini, but sometimes of arterial origin. Prolapsus of the cord occasionally occurs, also lacerations of the uterus, vagina and vulva, owing to the lack of support of the bony frame which has been divided. The urethra may also be involved. Closing the breach may also be rendered difficult by hernia of the bladder between the pubes.—*Presse Méd.*, May 10.

Questions, Answers, Etc.

LOOK OUT FOR HER.

MINNEAPOLIS, MINN., May 12, 1899.

To the Editor:—The accompanying letter and the reply indicate that I and probably other physicians have been imposed upon by a very plausible swindler.

MINNEAPOLIS, MINN., April 28, 1899.

Dear Doctor Riddell:—A young woman giving the name Miss Margaret

C. Brodie, and presenting very flattering testimonials from Drs. Donald McLean and Theo. McGraw of Detroit, came to me last November in great apparent distress, claiming to have been left here without money by a family for whom she had been nursing and who were largely in her debt. She said she had an engagement with one of your cases, provided she could get to Chippewa Falls. I gave her five dollars, and have heard nothing from her since. Can you inform me if she is an impostor? I ought to have written before, but have had other things to think of. Thanking you in advance, I am, sincerely yours,

EDWARD J. BROWN, M.D.
CHIPPEWA FALLS, WIS.

DR. E. J. BROWN, Minneapolis:

Dear Doctor:—The woman you write about I do not know and never knew. She never nursed any one for me nor ever had the promise of it to my knowledge. I think you have been swindled.

Fraternally, S. S. RIDDELL, M.D.

If you think it worth while at this late date to warn the profession, please do so. Yours very truly, EDWARD J. BROWN, M.D.

WORKS ON HYPNOTISM.

MILNOR, N. D., May 15, 1899.

To the Editor:—I desire some work on hypnotism—something that instructs how to apply it, as well as its uses. Can you direct me as to what to get, and where? H. W. EMANUEL, M.D.

ANSWER:—The most recent medical work on hypnotism in our language, so far as we are aware, is that of Wetterstrand, a Swedish author. The second edition of this appeared this year. Other works are those of. Bernheim, published in 1880, and giving the point of view of the Nancy school, Moll, and others. Bernheim's and Wetterstrand's works are published by G. P. Putnam's Sons, N. Y. Moll, on "Hypnotism," is another work which has had a recent edition, and is published by Scribner's Sons, N. Y. Either Wetterstrand or Moll will probably meet the requirements indicated by our correspondent. Any of these can be obtained through booksellers.

PRACTICE IN ILLINOIS.

PLYMOUTH, IND., May 29, 1899.

To the Editor:—Will you please inform me through the medium of the columns of the JOURNAL whether a physician who is now registered in the State of Illinois, will have to re-register under the new medical law of that State. The question will interest a great many who are registered, but now practicing in other States, and would not like to lose their Illinois rights. Fraternally yours, T. A. B., M.D.

ANSWER:—No.

The Public Service.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, to and including May 26, 1899:

Dallas Bache, colonel and asst. surgeon-general U.S.A., president of a board to meet at West Point, N. Y., to examine candidates for admission to the U.S. military academy.

W. H. Brooks, acting asst.-surgeon, leave of absence extended.

Chas. C. Byrne, colonel and asst. surgeon-general U.S.A., leave of absence granted.

Geo. H. Calkins, acting asst.-surgeon, from Matanzas, Cuba, to Gowanda, N. Y., reporting by letter to the surgeon-general.

Powell C. Fauntleroy, lieutenant and asst.-surgeon U.S.A., from the general hospital at Savannah, Ga., to San Francisco, Cal., for duty in the Dept. of California.

Clyde S. Ford, lieutenant and asst.-surgeon U.S.A., from Camp Meade, Middletown, Pa., to San Francisco, Cal., for duty in the Dept. of California.

Chas. M. Gandy, captain and asst.-surgeon U.S.A., member of a board to meet June 1, 1899, at West Point, N. Y., to examine candidates for admission into the U.S. military academy.

Chas. R. Greenleaf, colonel and asst. surgeon-general U.S.A., from Washington, D.C., to Camp Meade, Middletown, Pa., to inspect the camp, returning thereafter to his proper station.

Vernon J. Hooper, acting asst.-surgeon, leave of absence granted.

Merritte W. Ireland, captain and asst.-surgeon U.S.A., to examine recruits at Detroit, Mich., in addition to his duties at Fort Wayne, Mich.

Louis A. LaGarde, major and surgeon U.S.A., member of a board to meet at West Point, N. Y., to examine candidates for admission to the U.S. military academy.

Thos. H. Landor, acting asst.-surgeon, from Washington, D.C., to Canton, Ohio, for annulment of contract.

Wm. E. Purviance, captain and asst.-surgeon U.S.A., from Washington, D.C., to San Francisco, Cal., reporting thereat by June 7, 1899, to accompany Major P. H. Ray, 8th U.S. Inf., to his station in Alaska.

Erw. O. Shakespeare, major and brigade surgeon vols., assigned to duty in Washington, D.C., to complete report of board appointed by par. 40, special orders 194, Aug. 18, 1898—the typhoid fever board.

Alden E. Smith, acting asst.-surgeon, from Matanzas, Cuba, to Freeport, Ill., reporting by letter to the surgeon-general.

Victor C. Vaughan, major and division surgeon vols., assigned to duty in Washington, D.C., to complete the report of board appointed by par. 40, special orders No. 194, Aug. 18, 1898—the typhoid fever board.

S. T. Weirick, acting asst.-surgeon, previous orders directing him to report for duty with troops at Fyramid Harbor, Alaska, amended so as to direct him to report to the commanding general, Dept. of California, for assignment.

Wm. H. Wilson, captain and asst.-surgeon U.S.A., from the Josiah Simpson Hospital, near Ft. Monroe, Va., to San Francisco, Cal., for duty in the Dept. of California.

Robt. H. Zauner, acting asst.-surgeon, from Camp Meade, Middletown, Pa., to San Francisco, Cal., for duty in the Dept. of California.

Movements of Navy Medical Officers.—Changes in the medical corps of the U.S. Navy for the week ending May 27, 1899.

Surgeon F. Rogers, ordered to the marine rendezvous, Philadelphia, Pa., May 23, for duty in connection with recruiting.

Asst.-Surgeon C. H. DeLancey, detached from the marine recruiting rendezvous, Savannah, Ga., and ordered to the "Amphitrite."

Asst.-Surgeon Barton L. Wright, appointed May 16.

Surgeon E. H. Marsteller, detached from the "Raleigh" when put out of commission, and ordered home to wait orders.

P. A. Surgeon J. M. Moore, detached from the "Raleigh" when put out of commission, and ordered home to wait orders.

P. A. Surgeon W. F. Arnold, sick leave extended two months.

Marine-Hospital Changes.—Official List of Changes of Stations and Duties of Commissioned and Non-Commissioned Officers of the U.S. Marine-Hospital Service, for the seven days ended May 18, 1899.

Surgeon R. D. Murray, relieved from duty at Mobile, Ala., and upon expiration of leave of absence granted by bureau letter of the 11th inst., to proceed to Key West, Fla., and assume command of the service.

Surgeon John Godfrey, bureau order of May 10, 1899, directing him to report to the chairman of the board of examiners at Detroit, for examination to determine his physical condition, revoked.

Surgeon F. W. Mead, upon being relieved from duty at Portland, Me., to proceed to Vineyard Haven, Mass., and assume command of service.

Surgeon C. T. Peckham, relieved from duty at Pittsburg, Pa., and directed to proceed to Galveston, Texas, and assume command of the service.

Surgeon J. H. White, to proceed to New York City for special temporary duty.

P. A. Surgeon G. M. Magruder, granted leave of absence for thirteen days from May 19, 1899.

P. A. Surgeon A. C. Smith, to rejoin station at Norfolk, Va., reporting at Washington, D.C., en route.

P. A. Surgeon J. M. Eager, to proceed to Detroit, Mich., and report to medical officer in command for duty and assignment to quarters.

P. A. Surgeon W. J. S. Stewart, upon being relieved from duty at Vineyard Haven, Mass., to proceed to Mobile, Ala., and assume command of the service.

Asst.-Surgeon A. R. Thomas, bureau letter of March 30, 1899, directing him to proceed to the Tortugas quarantine station and assume command of the service, revoked.

Asst.-Surgeon H. S. Cumming, granted leave of absence for one day. Bureau order of March 30, 1899, assigning him to duty at the Cape Charles quarantine, revoked; upon being relieved from duty at Norfolk, Va., to proceed to the South Atlantic quarantine station and assume command of the service. Granted leave of absence for twenty-seven days.

Asst.-Surgeon Taliaferra Clark, upon being relieved by Asst.-Surgeon H. S. Cumming, to report to him for temporary duty. Relieved from duty at the South Atlantic quarantine station and directed to proceed to the Tortugas quarantine station and assume command of the service.

Asst.-Surgeon John McMullen, relieved from duty as sanitary inspector on U.S. transport "Buford," and directed to report to medical officer in command, U.S. marine-hospital service at the immigration depot, New York City, for temporary duty. Relieved from temporary duty at the immigration depot, New York City, and directed to proceed to Portland, Me., and assume temporary command of the service.

Asst.-Surgeon A. F. Anderson, to proceed to Norfolk, Va., on special temporary duty, and then to proceed to New York City and report to medical officer M.-H.S., at the immigration depot, for temporary duty.

Asst.-Surgeon W. R. McAdam, relieved from duty at Key West, Fla., and to continue in temporary charge of the Tortugas quarantine station. To report to medical officer in command Tortugas quarantine station for duty.

Acting Asst.-Surgeon R. C. Craig, relieved from duty at New York City, and directed to proceed to Pittsburg, Pa., and assume temporary charge of the service.

Sanitary Inspector R. E. L. Burford, granted leave of absence for thirty days on account of sickness.

Bureau order of May 10, 1899, convening a board of officers of the service to meet at Detroit, Mich., for the physical examination of Surgeon John Godfrey, revoked.

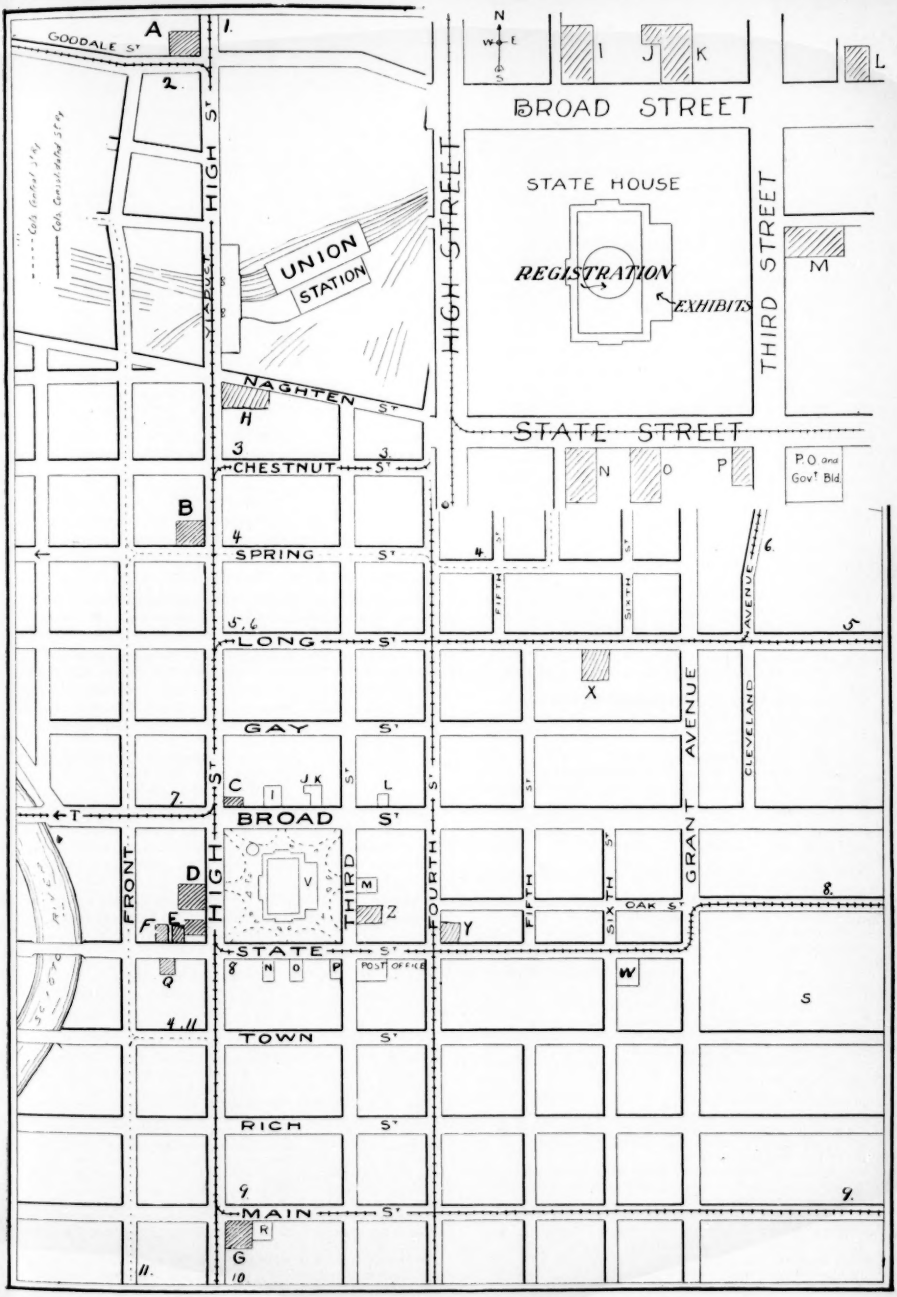
APPOINTMENTS.

Walter E. Merrill of Maine, appointed acting asst.-surgeon U.S. marine-hospital service, for duty at Portland, Me.

W. S. Henderson of Michigan, appointed acting asst.-surgeon U.S. marine-hospital service, for duty at Port Huron, Mich.

CHANGE OF ADDRESS.

Auld, J. M., from 714 Monroe St. to 475 Ogden Ave., Chicago.
Ashmead, A. S., from 210 W. 4th to 65 W. 12th St., New York City.
Bell, P. E., from Preston to Trip, Ga.
Bishop, F. L., from 626 to 516 N. Garrison Ave., St. Louis, Mo.
Burns, L., from Harrison, Ark., to Campbell, Ind. Ter.
Crume, G. P., from Chicago to 214 E. 34th St., New York City.
Copeland, W. L., from 866 W. Monroe St., to 918 Warren Ave., Chicago.
Callemo, U. A. D., from Merrill to Bay City, Mich.
Collard, L. R., from Galveston to 505 W. 13th St., Austin, Tex.
Dronin, G. L., from New Orleans to Mansura, La.
Dolan, A. N. J., from 311 E. Superior St. to 905 Wilson Ave., Chicago.
Furay, C. E., from South Omaha to Box 46, Chadron, Neb.
Grounerud, A., from Chicago to Beaver Falls, Minn.
Hering, E. R., from Chicago to Cross Plains, Wis.
Harwood, W. E., from Denver, Colo., to Joliet, Ill.
Hightower, L. H., from Carrollton to McCarley, Miss.
Knopf, S. A., from 955 Madison Ave. to 16 W. 95th St., New York City.
Longfellow, R. C., from 109 W. 9th to 1228 Vine St., Cincinnati, O.
McKelveen, F. G., from 150 to 242 S. Broadway, Denver, Colo.
Mooney, E. W., from Windsor, Ont., to Marine Hospital, Detroit, Mich.
Norwood, F. H., from Carrington to 5085 Wells Ave., St. Louis, Mo.
Norris, W. L., from Toledo, O., to San Mateo, Cal.
Nance, W. O., from 5311 Madison to 5213 Hibbard Ave., Chicago.
Palmer, W. A., from Evanston to Ada, Minn.
Patterson, C. L., from Chicago to Marengo, Ia.
Reynolds, H. R., from Chicago to Clinton, Ia.
Roberts, O. B., from Philadelphia, Pa., to Jacksonville, Vt.
Riggs, E. S., from Allegheny to Washington, Pa.
Ritter, J. K., from Marion to Seymour, Ind.
Rivers, E. C., from 16th and Stout Sts. to 1632 Welton St., Denver, Colo.
Robinson, P. R., from Chicago to Ennis, Tex.
Stewart, J. L., from Chicago to Breman, Ind.
Schoenbeny, A. E., from 319 Hermitage to 422 E. Irving Park Boul., Chicago.
Terrill, L. B., from Memphis, Tenn., to Anderson, Ind.
Thornton, J. W., from Omaha, Neb., to Earling, Ia.
Van Zant, B., from Galveston to Paris, Tex.
Wiley, H. H., from 247 Second to 208 Harrison Ave., Detroit, Mich.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BROAD ST
FRONT
HIGH
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THIRD
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Z
FOURTH
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FIFTH
SIXTH
OAK ST
GRAND AVENUE
8.
STATE ST
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O
P
POST OFFICE
4, 11
TOWN ST
RICH ST
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MAIN ST
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G
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BROAD STREET
STATE HOUSE
REGISTRATION
EXHIBITS
THIRD STREET
M
HIGH STREET
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FIFTH
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Association News.

AMERICAN MEDICAL ASSOCIATION.

Meets in Columbus, Ohio, June 6, 7, 8, 9, 1899.

LOCAL COMMITTEES.

COMMITTEE OF ARRANGEMENTS.

Starling Loving, Chairman.
F. F. Lawrence, Vice-Chairman.
H. M. Platter, Secretary.
Thomas C. Hoover, Treasurer.
Frank Winders, Assistant Secretary.

CHAIRMEN OF SUB-COMMITTEES.

Ways and Means—J. M. Dunham.
Reception—Frank Warner.
Entertainment—C. S. Hamilton.
Hotels—C. F. Turney.
Assembly Rooms—J. H. J. Upham.
Exhibits—N. R. Coleman.
Souvenir Book—F. W. Blake.
American Academy of Medicine—Edwin F. Wilson.
Medical College Association—Starling Loving.
Membership—J. U. Barnhill.
Registration—C. M. Taylor.
Rush Monument Fund—E. B. Fullerton.
Correspondence with State Medical Societies—D. N. Kinsman.
Foreign Correspondence and Visitors—C. A. L. Reed, Cincinnati.
Section Dinners—F. F. Lawrence.
Medical Journals—J. E. Brown.
Hospitality—W. D. Hamilton.
Information—J. F. Baldwin.
State Medical Examiners—N. R. Coleman.
National Legislation—L. B. Tuckerman, Cleveland.
Department of Public Health—C. O. Probst.

PLACES OF MEETING—SEE MAP.

1. General Sessions, Grand Opera House, O.
2. Practice of Medicine, House of Representatives, south end State House.
3. Diseases of Children, Senate Chamber, north end State House.
4. Surgery and Anatomy, Congregational Church, K.
5. Obstetrics and Dis. of Women, Y.M.C.A. Auditorium, M.
6. Cutaneous Medicine and Surgery, Congregational Church, Sunday School Room, J.
7. Ophthalmology, Trinity House, L.
8. Laryngology and Otology, Trinity House, L.
9. Neurology and Medical Jurisprudence, First Presbyterian Church, P.
10. State Medicine, Committee Room, State House.
11. Stomatology, Committee Room, State House.
12. Physiology and Dietetics, Committee Room, Board of Trade, I.
13. Materia Medica, Pharmacology and Therapeutics, Council Chamber, City Hall, N.
14. National Confederation State Examining and Licensing Boards, Senate Chamber. (Monday 10 A.M.)
15. Medical Editors, Y. M. C. A., M.
16. American Medical College Association, House of Representatives. (Monday, 10 A.M.)
17. American Academy of Medicine, Chittenden Hotel Assembly Room, B.

TRANSFER COMPANY, PASSENGER RATES.

Depots to or from any hotel: omnibus, passenger with trunk, 25c.; carriage, with trunk, 50c.; coupe, without trunk, 25c.; with trunk, 40c. Hand luggage free.

Carriage for driving: first hour, $1.50; each additional hour, $1; coupe, per hour, 75c.

STREET CAR SERVICE—SEE MAP.

1. Protestant Hospital, Ohio Medical University; Ohio State University; North Columbus; Olentangy Park; Worthington.
2. Auditorium; Goodale Park; State University.
3. United States Barracks.
4. United States Barracks; Minerva Park; Westerville.
5. St. Anthony's Hospital; Franklin Park.
6. United States Barracks.
7. T. & O. C. Depot; Mt. Carmel Hospital; Cemeteries; Imbecile Asylum; Insane Asylum; Camp Chase.
8. St. Francis Hospital; Starling Medical College; Children's Hospital.
9. Capital University; Bullit Park.
10. South Columbus; City Park; Driving Park.
11. Baseball Park.

Street car fare, 5c.; tickets, 6 for 25c. No transfers between the two companies, but universal between the different lines of each company for one cash fare.

All hotels are on direct street car lines from Union Depot.

All lines reach the State House square.

HOTEL RATES—SEE MAP.

Park, A, $1.50 to $2.50. Chittenden, B, $2.50 to 4. Smith's, C, (European), $1.50. Neil, D, $2 50 to $3 00. Goodale, E, (European) 75c to $1.00. American, F, $2.00. Emerson, F, $2.00. Great Southern, G, $2.50 to $4.00. Davidson, H, $2.00. Corrodi, Q, $2.00. Normandie, X, $1.50. Norwich, Y, $1.50. Vendome, Z, $1.50.

DIRECTORY—SEE MAP.

A, Park Hotel.
B, Chittenden Hotel.
C, Smith's Hotel.
D, Neil House.
E, Goodale.
F, American and Emerson.
H, Davidson House.
I, Board of Trade.
J, Sunday-School Room Congregational Church.
K, Congregational Church.
L, Trinity House.
M, Y.M.C.A.
N, City Hall.
O, Grand Opera House.
P, First Presbyterian Church.
Q, Corrodi Hotel.
R, Great Southern Theater.
S, Deaf and Dumb Asylum.
T, T & O. C. Ry. Depot.
V, Exhibit Hall.
W, Starling Medical College & St. Francis Hospital.
X, The Normandie.
Y, The Norwich.
Z, The Vendome.

For further information address the chairman of the appropriate sub-committee, or

J. F. BALDWIN, M.D.,
Chairman Committee on Information.

Smoker and Concert.—For Wednesday, June 7, at 8 P.M., a smoker and concert, in honor of the AMERICAN MEDICAL ASSOCIATION, will be given by the Humboldt Verein at Wirthwein's Hall, 339 S. High Street, Columbus, Ohio.

Meeting of Medical Librarians.—The undersigned committee on medical libraries, appointed by the arrangements committee of the AMERICAN MEDICAL ASSOCIATION, invites all medical librarians, editors, writers and all interested in the growth and increase of medical libraries in the United States, to attend the second annual meeting, to be held in connection with the meeting of the AMERICAN MEDICAL ASSOCIATION, Monday, June 5, at 3:30 P.M., at the new lecture hall of the Starling Medical College.

Com. { ADOLPH FEIEL, M.D., Chairman,
H. C. FRAKER, M.D.,
W. L. TOWNS, M.D.

General Business Committee.—The first meeting of this committee will be held on Monday afternoon, June 6, at 5 o'clock, in the Columbia Rifles Armory, seventh floor of the Great Southern Hotel, Columbus, Ohio; subsequent meetings in the same place at 5 P.M. on each day of the meeting. It is very important that all the members of the committee should attend the meetings, in order that the business of the ASSOCIATION may be properly transacted. L. Duncan Bulkley, M.D., secretary General Business Committee.

Railroad Rates for the Columbus Meeting.—The committee on transportation of the AMERICAN MEDICAL ASSOCIATION presents the following, as the final rates agreed upon in the different territories for the Columbus meeting:

The New England Passenger Association, Trunk Lines Association, Southwestern Passenger Bureau and Southeastern Passenger Association grant a rate of one and one-third fare for the round trip on certificate plan.

The Central Passenger Association has granted a one-fare rate for the round trip. The Western Passenger Association has granted a one-fare rate plus $2 for the round trip. In the latter territory, where the rate for passage to the eastern gateway is $6 or less, the rate will be one and one-third fare for the round trip, provided that where one-third fare to Chicago is $2 or less, 50 cents additional will be added to the cost for return transfer. (See JOURNAL, May 6, p. 1012.)

Tickets will be on sale in the various railroad territories on time, in advance, sufficient for reaching Columbus, the place of meeting, by continuous uninterrupted trip. Delegates should notify ticket agents in advance, in order to secure the certificate platform.

H. L. E. JOHNSON, M.D.,
Chairman Transportation Committee.